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## CONTENTS OF VOLUME ELEVEN, THIRD SERIES


| NUMBER | | PAGES |
|---|---|---|
| 1. | Papers and Discussions of the Twenty-Second Annual Meeting, New York City, Dec. 27-31, 1909 | 1-386 |
| 2. | Handbook of the Association, 1910 | 1-79 |
| 3. | The Child Labor Policy of New Jersey. By A. S. Field | 387-616 |
| 4. | The American Silk Industry and the Tariff. By F. R. Mason | 617-794 |

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# PAPERS AND DISCUSSIONS

OF THE

# TWENTY-SECOND ANNUAL MEETING

BEING THE TWENTY-FIFTH ANNIVERSARY OF THE FOUNDING OF THE ASSOCIATION

NEW YORK CITY

DECEMBER 27-31, 1909

APRIL 1910

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## TABLE OF CONTENTS.

PAPERS AND DISCUSSIONS: PAGE

Citizens' Meeting and Official Welcome: 1
- W. M. Sloane........................................ 1
- J. H. Choate........................................ 2
- Geo. B. McClellan.................................... 9
- Nicholas M. Butler................................... 14
- Charles E. Hughes.................................... 20

Observation in Economics—Presidential Address, by Davis R. Dewey.................................. 29

Anniversary Meeting .................................. 46
- Richard T. Ely....................................... 47
- Arthur T. Hadley..................................... 94
- J. L. Laughlin....................................... 99
- James Bonar ......................................... 104
- E. J. James.......................................... 107

The Phenomena of Economic Dynamics, by M. Pantaloni.. 112

Discussion of the Phenomena of Economic Dynamics:
- J. B. Clark.......................................... 123
- S. N. Patten......................................... 127
- F. A. Fetter......................................... 130

Outlines of a Theory of Wages, by F. W. Taussig........ 136

Discussion of Outlines of a Theory of Wages:
- G. R. Wicker......................................... 157
- L. C. Marshall....................................... 161
- J. H. Hollander...................................... 167

Round Table on the Problems of Country Life:
- Horace Plunkett...................................... 171
- James Bryce ......................................... 177
- T. N. Carver ........................................ 179

Valuation of Public Service Corporations, by W. H. Williams ........................................ 196

Official Valuations of Private Property, F. W. Whitridge.. 239

An Argument Against an Official Valuation of Railroad Properties, by J. P. Cotton, Jr.................. 253

Discussion of Valuation of Public Service Corporations:
- E. B. Whitney........................................ 259
- Victor Rosewater..................................... 262
- C. F. Mathewson...................................... 264
- A. C. Pleydell....................................... 278
- B. H. Meyers......................................... 279

The Causes of Trusts and Some Remedies for Them, by Francis Walker................................ 290

The Sherman Anti-Trust Act, by Victor Morawetz........ 321

Discussion on Trusts:
J. W. Jenks .......... 328
The Progress of Taxation During the Past Twenty-Five Years, and Present Tendencies, E. R. A. Seligman .......... 331
Discussion on The Progress of Taxation:
Frank L. McVey .......... 354
Henry Higgs .......... 358
The Assessment of Property for Taxation, by Lawson Purdy .......... 360
Discussion on Taxation:
J. G. Schurman .......... 366
John Martin .......... 368
T. N. Carver .......... 369
James L. Cowles .......... 371
A. C. Pleydell .......... 374
R. R. Bowker .......... 376
Royal Meeker .......... 376
Benj. C. Marsh .......... 378
K. K. Kennan .......... 379
E. W. Bemis .......... 381
Allen R. Foote .......... 382

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## CITIZENS' MEETING AND OFFICIAL WELCOME, CARNEGIE HALL, MONDAY EVENING, DECEMBER 27, AT 8 P.M.

William M. Sloane, Temporary Chairman: Ladies and Gentlemen: When the two Associations of scholars chose to celebrate their jubilee in the City of New York, the response from this city was most hearty and spontaneous, and you have before you on the programs the names of the ladies and gentlemen of New York who have united to make this a jubilee not only in name, but in fact. This meeting is the work of the Men's Reception Committee, but the ladies of New York have been in no way inferior, as you will see later in the program, that, with their lunches and receptions and other jubilees, and all that goes to make merriment at this holiday season, they have been not only coadjutors, but they have been leaders in the great cause. We are very grateful—I speak for the Joint Committee of Managers—we are very grateful indeed for your presence here. Our gratitude takes somewhat the form, so well known in the old dictionary, of a lively sense of favors to come. And we bespeak your hearty coöperation with us further throughout the scientific meetings that are to follow this meeting, in particular the presidential addresses. If you will come on the subway to 116th street, there you will find a commodious and delightful auditorium prepared for your reception. These addresses will keep you fully informed of the latest work which has been done in the lines of history and in the lines of economics. We therefore trust that you will find your way in considerable numbers to our meeting at

Columbia tomorrow, that being especially and peculiarly the Columbia Day; and later on to the Waldorf. If you desire programs, you may have them by return mail if you address the Joint Committee at its headquarters at the Waldorf-Astoria.

I had a few years ago an humble friend of British descent, whose occupation was the keeping of bathing houses on the Atlantic Coast, and he remarked to me one day, in the midst of a terrific storm, "Mr. Sloane, hi ham never so 'appy as when the helements his hup." And the "helements" have been "hup" in the sense which is manifest to everybody who has experienced this storm. In one respect particularly it has been very bad for us, in that the railway declined to make itself responsible for the transportion safely and swiftly of the President of the United States, who heartily desired, as he informed me but one short week ago, to be present and address the audience that would gather here. But we have with us the Chief Magistrate of our own Commonwealth, who is in no wise daunted when the elements are up, and who braves transportation companies and who lays aside the affairs of state, to grace this occasion with his presence. And it is only fitting that we should express our hearty gratitude to him for the sacrifice which he has made to be present. In the name of the Men's Committee, I therefore formally call this meeting to order, and ask you to accept as its chairman one of the most distinguished citizens of New York, in whose renown we all rejoice, the Honorable Joseph H. Choate.

JOSEPH H. CHOATE: Ladies and Gentlemen: I never feel worse than for the fifteen minutes before I am called upon to speak, and never better than when I find myself in the presence of such an audience as this.

I regard it as a very great honor to be called upon

to act as chairman of this meeting and to welcome this great congress of learned men who have gathered from all parts of the United States—some of whom have crossed the ocean—to take part in these discussions that are to take place this week.

The guests of honor, as we may call them—the American Historical Association, and the American Economic Association—I may perhaps say a word about without wounding their feelings.

The American Historical Association is celebrating its Twenty-fifth Anniversary. In that short period of time it has grown from a little handful to a vast body of members, represented in all the states and all the territories, each interesting its own community and bringing from it to the collected body comfort, aid, and wisdom. And to show you how choice their membership is, how choice their honors are, I will say that it never had but one honorary member, and that is a great historian, the Honorable James Bryce, Ambassador from Great Britian.

It has done its true work in developing the study of history. It has contributed very largely to historical research and knowledge in this country among the people and in the schools; and its annual publications, sent forth by the government as public documents, are of immense value.

As to the American Economic Association, I do not profess to be quite so familiar with all of its objects. I started the question at the breakfast table this morning, "What is economics?" or "What are economics?" and I got no satisfactory answer; and, as I was not very well informed on the subject myself, I took refuge in the dictionary, one published some fifteen or twenty years ago. That said that it related to the production, distribution, and the use of wealth. Well, now, nothing could be

better for New York, and nothing could be better for the economists than that they should come here and instruct us upon that very subject.

I do not mean to say much about our guests, but I think I ought to say something about New York to these distinguished gentlemen, some of whom have come all the way from the Pacific coast, and some all the way across the Atlantic; and perhaps I ought to correct some current errors in respect to the City of New York.

One would think from reading some of the newspapers and magazines that come to us from a distance that the people of the City of New York were entirely engaged in the production, the distribution, and the use of wealth. One would suppose that we were a sordid, selfish, mercenary community, bent upon nothing but pleasure and money; that the men spend their nights and days in piling up dollars, and the women their days and nights in spending them. Well, nothing could be more imperfect, to say the least, as a description of New York, than that.

It is true, as in all other communities that I know anything about, the world is too much with us. Late and soon. getting and spending, we lay waste our powers. It is true that the pursuit of wealth is an almost universal malady here as everywhere else, but the tables are written on both sides. There is another side to the picture of New York which I wish for a few moments to dwell upon for the consideration—not for the entertainment—of these honored guests of ours. In that great American Renaissance which set in after our Civil War, which Lincoln prophesied at Gettysburg when he said that this nation under God was to have a new birth of freedom,—little dreaming what tremendous results were to follow, and how a thousand

times more than he anticipated his prophecy was to be fulfilled,—New York has profited exceedingly. I call it the great American Renaissance because, when the Union was finally and actually and forever restored and slavery was forever laid away, when that cancer that had gnawed upon the vitals of the Republic for one hundred years was killed, a new America sprang up, exhibiting an energy, an enterprise, an imagination, a daring, and a hope such as had never been dreamed of before. And the whole country awoke to new action, to new endeavor, to new achievements, in which it has accomplished more in the same space of time than, I believe, any other nation known to history.

Well, now, New York has been the recipient, New York has got the benefit of all the great triumphs, of all the great successes and achievements that have taken place all over the land. New York has grown great because the country has grown so great to feed and to support it, so I think that now, without hesitation, we may say it is the center of the civilization of the continent.

See what wonderful things have been achieved here in this city under our very eyes. Look at our universities—happily led by Columbia, taking the lead in some respects of all the universities in the land, coming as I believe in closer contact with the people, a more truly democratic university than you can find in any other place, allying itself with the great institutions it finds about it, opening its doors every day to the public to valuable lectures on many branches of learning. Never was there a more democratic institution in the shape of a university than that. Then take the College of the City of New York, and the Normal College for Women—and I am told we are the only city that sup-

ports at its own public expense, without a dollar of cost to the pupils, two great institutions like these for higher collegiate education—which redounds not only to the great advantage of the city, but to the whole country itself.

And then take our common school system with its 650,000 pupils. No wonder that the city grows so fast that we are unable every autumn to house them. No wonder that they have to take half days instead of whole days. No wonder that it is almost impossible for the resources even of this great city to keep up with its own growth in the production of children and their presentation to the public schools.

And then, take our great museums. I remember only forty years ago we went, cap in hand, to the Legislature in Albany for charters for the Museum of Art and Museum of Natural History. They were granted willingly, but without any thought on the part of anyone in the Legislature which granted them, or on our part who received them, that after forty years they would grow to be institutions that would attract from many distant countries experts to view their treasures and see what New York and America could accomplish.

Now all this has been done; and I claim not for New York the credit, but for the whole country I claim the credit, because after all New York has been only the recipient of the result of the efforts and achievements of the rest of the country. We give freely because it is freely given to us; and I think I may fairly say that no other community is doing or has done so much proportionally for the development of education, of energy, of art and science throughout the country, as this sometimes much abused City of New York. All the great univer-

sities acknowledge their obligations to the beneficeince, to the public spirit, to the sympathy of the citizens of the City of New York. Harvard itself, somewhat distant and somewhat differing from others in its immense original endowments; Columbia, Yale, Princeton, Chicago; all owe their strength in very large measure to the sympathy and support which they have received from here. And I think I should not be wrong in saying that there is hardly an institution of learning, hardly any institution established for the promotion of the general welfare of mankind throughout the land, that directly or indirectly has not felt the beneficience, the generosity, and sympathy of the high-minded citizens of this community.

Well, then, the whole thing is reciprocal; it all acts and reacts; New York is the heart of the life of the nation and it sends its blood and strength throughout all the arteries of communication throughout the land for the encouragement and for the benefit of all they find in their way. But they find their way back, through all the veins of traffic and transportion, to be constantly renewed and restored. So when these many learned societies make their visit once in twenty-five years—I hope it will be much oftener—when they come here from every state in the Union to enjoy such discussions and illumination as will proceed from the exercises of the present week, they are but coming home, they are but bringing back to us the sympathy and the interest which we have manifested for them. And I believe it will be not only a very interesting week for these visitors, but it will redound in double measure to the benefit and the advancement of this great City of New York.

Truly, this is a great national occasion! I am sorry the President of the United States, whom you all so much admire, is not here to be the typical representative of the

United States in receiving all these guests. It is really a national affair; not confined to one society, to five, or to twenty societies; not confined to one city, but it speaks whole immense volumes for the intelligence and the interest of the people of this country and of this city in these questions in which these societies are all interested, that such a gathering can take place in this city, and such an audience can come together as is here tonight.

Gentlemen, there is not one of your societies, however numerous they may be, however abstruse or difficult the subjects with which it has to deal, that does not find in this City of New York a large number of educated people fully in sympathy, fully interested in what you may have to deal with. I observed in London that no man could come from any quarter whatever of the world to lecture upon any subject, however obscure, however obsolete, or however new, without finding an audience in the City of London made up of people who were interested in his particular subject, and who welcomed his approach. New York, I believe, stands in the same relation to the United States and to the whole of this Continent of America. It is interested, it is ready to furnish listeners for any man who comes from any quarter of the globe to discuss these subjects that are laid down on your program, and I prophecy for this conference a very great success and very great benefits not only to those who attend it, but to all the citizens of the United States.

But, I know time is flying—it never flies so fast as when a man is on his feet and other people are sitting. You will have the privilege of listening to three very interesting and important speakers, and foremost among them I have the very great pleasure of presenting to you the Mayor of New York; and I am very glad that you thus welcome his coming, because in a certain way it is.

a kind of farewell address of his. He is not on his last legs—you will not think so when he rises to stand before you—but he has but four or five days more of public service, which has rested so heavily upon his shoulders, and which he has performed so well.

I have the great pleasure of presenting to you his Honor, the Mayor, George B. McClellan.

George B. McClellan: Mr. Chairman and Governor; Ladies and Gentlemen: I have come before you this evening with a great deal of hesitation, for I am a layman and a dabbler, and you profess the two kindred sciences of life,—economics, the science of the how, and history, the science of the why; economics, the science of today, and history, the science of yesterday.

I am sure you will understand why it is that I, who am officially *in extremis,* who in less than one hundred hours will have officially passed away and ceased to be, why it is that for the moment, at least, I take more interest in history than in economics.

I think that we are all agreed, those of us who dabble and those of us who profess alike, that history is a science; that its function is therefore, in the words of Speaker Reed, to add to and not to subtract from the sum of human knowledge; that the purpose of teaching us history is the benefit of the taught rather than the glory of the teacher.

It is true that the tons of books upon historical subjects that are annually cast upon the waters and that return to their authors after many days unsold, and the multitude of earnest and worthy but hopelessly dull people whose occupation is the instruction in history of those who are so intellectually imprisoned that they are powerless to escape, would seem to disprove the rule. And yet, the rule remains, even though sometimes more honored in the breach than in the observance.

The field of historical study is so vast, the time in the rush and worry of modern civilization which we are able to give to education is so pitifully short, that the very best that we can hope to accomplish is merely to scratch the surface. When I was an undergraduate, the total time given to the study of history in our curriculum was two hours a week during the junior year. In seventy-four hours our professor was expected to give us a complete knowledge of the history of every people and every country thoughout all time. We were fortunate in sitting under one of the most brilliant intellects and the greatest teacher I have ever had the honor to come in contact with. Yet even Professor William M. Sloane could not accomplish the impossible. But he succeeded in giving to us two precious gifts that have endured always—a desire to read history and the knowledge of how to read it. When we left him, every intelligent boy among us did so with the conviction that, while truth may sometimes be stranger than fiction, the reading of history is always a more absorbing and more fascinating pursuit than the reading of all the novels that were ever published.

Professor Sloane solved for us the whole problem of education, the purpose of which is not the cultivation of intellectual specialists, or of omniscience, but to instruct the pupil, to inspire the pupil with a desire to learn, and to teach him how to study.

It has become the fashion to sneer at Dumas, and at Prescott, and to shrug the shoulders interrogatively at Ferrero. It may be that Dumas and Prescott are atrociously incorrect; it may be that Ferrero instead of carrying us back into the past brings the past down to us; that he lacks the sense of proportion and perspective; that his work is out of drawing, his values small, and that his high lights are too intense; all this may be true, and

yet the fact remains that Dumas and Prescott and Ferrero make all the past for us an actual living present; make of the Bourbons, and of Richelieu, and Mazarin, of Ferdinand and Isabella and Torquemada, of Sulla, Caesar, and Cicero, human beings like ourselves, with flesh on their bones and blood in their veins, with hearts that beat and brains that think, with our likes and dislikes, our virtues and vices, our passions and prejudices, instead of paragons of excellence or monsters of evil.

Human automata, dressed in the costumes of the foregoing periods, they have made the men of the past live again for us, so that we may make of them our friends, the companions of our treasuries, sharers of our sorrows and our joys. In other words, we learned to like the reading of history for its own sake, so that ultimately,—ultimately, mind you,—even Hallam's Middle Ages becomes a joy, and the Chronicles of John Deacon in the original hog-Latin a pastime for a summer's afternoon.

There is a general impression that there is nothing easier than to write a book or to teach, provided one only tries hard enough. As the result of this, thousands of statistical abstracts masquerade in solemn and smug pomposity as history, and hundreds of incompetents cause their wretched little pupils to loathe and curse the very sound of history's name. We cannot all be Sloanes or Dumas or Prescotts or Ferreros, but we can most earnestly resolve that we shall not burden the world with an additional book unless we have a message to convey, and that we shall not try to teach unless we feel the responsibility of the task. This negative duty of refraining from writing and teaching history is more and more observed, certainly in this community; and the reason for it is that there is a constant development in the cultivation of the people of this town. As our chairman has told you,

there is a false idea that New York is so occupied in the pursuit of wealth, so busy in the struggle for existence, that her people have no time for anything else; that her men are only money grabbers, her women butterflies. Nothing could be more false. There is an intellectual side to this city. New York draws nearer and nearer, as the years go by, to that goal that all thinking New Yorkers hope she may one day attain, of becoming not only the world's centre of wealth, but its centre of thought as well.

We have museums, libraries, collections, which, through the munificience of the individuals and the generosity of our taxpayers, are the most important in the country. Thanks to Mr. Carnegie, our branch library system is unequalled. Thanks to the knowledge and the generosity of Mr. Morgan, New York is rapidly earning her place among the art centres of the world. We have men and women who think as well as men and women who do. We have scholars, scientists, artists, philosophers, the centre of this world of schools, and the colleges with the museums and the collections. The centre of our world of intellect and of thought is our great University of Columbia.

I am not a Columbia man, for Princeton is my Alma Mater, but I should be lacking in common fairness if I did not do simple justice to that great institution of research and of thought. From Columbia emanates the impulse which has forced our people upward and onward. in the direction of higher thoughts and nobler aspirations than the pursuit of the gross and of the sordid; has forced them to adhere to the ideal that there is something in this world more worthy of striving for and more worth having than wealth; the ideal that the cultivation of mind and the development of character and of soul depend

upon our own exercise, and cannot be bought with money. And Columbia derives her inspiration partly from the man who has made her what she is, the man who has raised her from a secondary position to one of eminence among the great universities of the world. The public of letters, the public of science, the public of New York owe a debt of gratitude difficult to pay to that eminent New Yorker, Nicholas Murray Butler.

Ladies and Gentlemenn, let me assure you of the appreciation of the people of our city that you should have selected New York as your place of meeting. We are very proud that you should hold your celebrated jubilee here. I congratulate you most heartily upon the work that you have accomplished in the past, that you are accomplishing in the present, and that, God willing, you will continue to accomplish in the years to come. When you hold your Golden Jubilee, may you do so with the consciousness that the second quarter of the century of your life has been even more useful to mankind than was the first.

In the name of the people of the City of New York, I, the Mayor, bid you a sincere and hearty welcome. May the proceedings of your Association be most successful; and may you so enjoy yourselves that when the time comes to select the place for your next meeting you will unanimously choose our city. But, should that be impossible, at the close of your meetings, if you find that you must leave us, I earnestly trust that you will do so with the firm resolve that, at least as individuals, some day you will return.

Mr. Choate: Ladies and Gentlemen: I am delighted to see by your applause how thoroughly you appreciate the encomiums that are lavished, and so justly lavished, upon Columbia University. It is truly the crown of our city; the centre of our municipal civiliza-

tion. And, if these guests who are gathered here to-night had no other result of their sight-seeing than to visit Columbia, to visit its noble and unmatched library and its contents, the splendid group of buildings by which it is surrounded, and to study for themselves the courses of instruction that are there laid out, it would be a sufficient reward. There is one very rare collection there this week, such, I think, as has never before been found together in any one place, and perhaps may never be found again; and that is a collection of historical documents, manuscripts, and other choice treasures, which are gathered there for the entertainment of the visitors. And now I have very great pride and pleasure in presenting to you the President of Columbia University, Dr. Nicholas Murray Butler.

NICHOLAS MURRAY BUTLER: Mr. Chiarman, Governor, Ladies and Gentlemen: Truly a noteworthy and significant welcome has been prepared for this company of American scholars. It is significant and it is noteworthy that in our democracy the President of the United States, the Governor of the State of New York, and the Mayor of the City are willing and glad to take time from their laborious duties to greet and to mingle with a thousand of the nation's scholars.

We must all regret the enforced absence of the President of the United States. But it is worth remarking how suitable it is that the President, the Governor, and the Mayor should welcome this body of men drawn from all parts of our nation, who are students of history, economics, and political science. These three great public officers are in personal direction and supervision of three of the greatest experimental laboratories of history, economics, and political science that the world has to offer.

In your Associations, in your studies, and in your libraries you historians and economists and political scientists study and analyze the waste, the velocity, and the traction powers of the wheels of government. But those wheels actually revolve in their presence and under their direction, and perform the practical work of government with their guidance. Is it not appropriate that the men whose offices bring them in closest contact with the results of your studies, applied to the daily practical problems of government and of administration, should endeavor to appraise for us all the value and significance of the studies to which you are devoted? There was once a governor of this state whose heart was thought by some to be just a little cold toward projects presented to him under the label of reform, who used to receive and consider the requests of citizens who waited upon him to secure his aid for certain legislative proposals with a formula something like this:

"I am very glad, gentlemen, to have had the pleasure of seeing you. I think I understand what it is you have in mind. Won't you draw a bill and send it up to me to look at?"

And it is related that his petitioners rarely came back. That particular divorce between theory and practice we are rapidly learning how to overcome. And, thanks to the activity, the teaching, and the publications of your Associations, the public opinion of the United States and of every state is being educated up to a point where it is beginning to demand express service and express knowledge dealing with daily problems of legislation and of administration.

A democracy grows in power, grows in weight, grows in significance, grows in its very democracy as it learns

to combine and unite theory and practice, and as it learns to call upon the men who know to tell it how to act in the presence of a problem, a dilemma, or a series of movements of opinion demanding some particular form of legislative or executive relief. But there is one difficult thing in this endeavoring to relate theory and practice, one difficulty in the way of bringing the man who knows into the position where the great mass of the population will turn to him with trust and confidence, and that is the absence so often from our studies and our speculations of allowance for the human element in life and in government.

If any one thing seems just now as you meet in Twenty-fifth Annual Meeting, if any one thing seems to be more clearly indicated than another, it is that all of the studies that you represent are focusing themselves upon what we call in America, in England, in France, in Germany, in Russia, the social problem. We are not now studying history so much for entertainment as for light upon today. We are not now studying economics and political science so much to secure display for our originality, our inventiveness, as to throw light upon the problem of today. And the great problem of today, whether you approach it from history, or approach it from economics, or approach it from public law, is the great problem of the mass of democratic population. What are you going to do? What policies are you going to recommend? What legislative acts are you going to suggest? What lesson from history and economics are you going to draw that will lead us together out into this great population of four or five millions of people, and into the other great populations the world over, and raise the average comfort and happiness and opportunity of the mass? How are we going to bring into our studies

enough of the human element to let us see the sociological, the ethical implications of what we are trying to do? Just now our sociological friends are meeting with the natural scientists in another part of the country. They ought to be here. There is no set of subjects, no line of inquiry, or no type of reflection more necessary as complementary to our studies of history, economics, and public law, than these sociological studies which let us see the other man's point of view.

We owe an enormous debt to those men, primarily Frenchmen and Italians, who have led the way into the study of the mind of the mass, the movement of opinion, the expression of emotion and feeling, the blind struggle of the deepest human instinct, the instinct for expression, that come out in the great life of a community and a commonwealth. It is simply blindness in this twentieth century to study history and economics and public law and to lose sight of all that. The work of these great societies has passed out of the class of theoretical studies, if there be any such,—I doubt it, but if there be your societies have carried these studies outside the limit of the theoretical field,—and you are dealing today with the most practical, the most pressing, the most immediate questions in human life. You may be, as the Mayor has eloquently said, reading again the history of Rome, or the pages of Ferrero; you may be studying the intricacies of the civilization of the Middle Ages, or you may be discussing philanthropic theories of value; but always and everywhere you are focusing on this human twentieth century problem.

You will remember that when the fall of the Bastile was announced, Fox was reported to have said, "How much the greatest event in history, and how much the best!" I wonder whether Fox did not mistake the sign

and symbol of an event for an event itself. I wonder whether what his eye seized upon as the most significant happening in history was not just one more of the visible evidences of the onward movement of that great democratic tendency which gives form and shape and guidance and interpretation to our modern life, beginning as the dumb expression of instinct, finding here the articulate voice and there a battle cry, coming out into the open to follow an eloquent and persuasive leader, seizing upon a constructive mind to teach it how to write itself upon the statute book, making constitutions, laws, governmental systems; but always and everywhere seeking human expression, to get out into the open, out beyond the grasp of privilege, and out beyond the limitation of artificial oppression, out where the human soul and mind and feeling could express themselves as free agents and render some kind of service to their own personal ideals, and to the race to which they belong. I wonder whether that is not the greatest thing in our modern history. And I wonder whether the relation of these societies and their studies to it is not most intimate and direct. Judged as history judges, not quite with the measure of the theologist or the physicist, but still judged as history judges, democracy is still very young. Enormous human issues, psychological, ethical, social, hang in the balance of its ultimate success or failure. And those of us who are so fortunate, and who ought to be so happy that the lot of our lives is cast in these delightful stimulating and practical studies, ought to feel from the contact with this great City and from association with our colleagues and friends that we through our studies and the interpretation of them are contributing what we can to the perfection, the development, and the upbuilding of our modern American democracy; that

every human being that owes its allegiance may find the chance for self-expression, for growth, for development, and for usefulness.

I should like to say a word in appreciation of the presence here of a distinguished group of scholars from the Old World. In one of our newspapers yesterday I read a somewhat animated discussion as to whether there was any culture in America. Into that dark and disputed field I shall not enter. But I do say whether we have in America any share of culture or not, we have a scholarly and a gentlemanly courtesy and a feeling of appreciation and regard for the distinguished men who have come from their posts of duty in Great Britain and France and Holland, in Germany, in Italy and Spain, and elsewhere across the ocean, to assist at these important conferences. On behalf of my colleagues, I bid our colleagues from across the sea a sincere and hearty welcome to New York, and to the meetings of the societies which they are to honor by their presence.

I have said enough to indicate that, in my thinking, this occasion is one of high seriousness. This is no mere holiday occasion, although it will be made as pleasant as it can possibly be made for each and every guest. It is a high and serious gathering to deal with high and serious things, and remember that the welcome offered you by nation, by state, by municipality and by your own immediate colleagues, is so warm and so sincere, not only because of your distinguished personality—although it would be so for that alone—but because of the significance of the gathering of a thousand men who are giving their lives, their fortunes, and their sacred honor that great studies may be pursued and kept alive in our American life, and that their practical lessons may be drawn for the good of the whole people.

MR. CHOATE: I may now refer to a message from the President of the United States, whose absence we all deplore. This is directed to Mr. Clarence W. Bowen, Chairman of the Executive Committee.

"White House, December 27: In view of the fact that the railroad people can give no assurance of my reaching New York in time for your meeting this evening, and as I must be here the first thing in the morning, I do not feel warranted to make the trip. Please, therefore, express my excuse and regrets.

William H. Taft."

And now, Ladies and Gentlemen, the Chief Magistrate of the State of New York realizes in his own person for the time being the entire history of the state. He is engaged during his more or less protracted term or terms of service in studying these very questions of economics that you have all come here to assist in deciding. I have sometimes thought, looking at our state, looking at our city, under other administrations, that it would be well if the whole thing could be put in the charge of an executive committee of the Economic Association. But I am perfectly satisfied with things as they are at Albany, and hope I shall be with things as they are to be in the City of New York, and I have the great pleasure of presenting to you the Governor of New York, the Honorable Charles E. Hughes.

CHARLES E. HUGHES: Ladies and Gentlemen: When I was invited to be present upon this occasion, I reminded a spokesman of the committee that for the Governor the week before the convening of the legislature was one of fasting and prayer. It was a week in which every citizen of the state who had evolved some plan for improvement in legislation, or in administration—and there are some millions of them to my personal knowl-

edge—had an indefeasible right to see the Chief Executive. It was a time for inspection, introspection, examination, and explication just prior to formal communication. I told him it was absolutely impossible at such a time, despite my great desire to join in extending this welcome, for me to be here. He answered that the President of the United States was going to give a welcome on behalf of the nation, and that the Governor should be present to give a welcome on behalf of the state. Now, you know the activity of presidents is the despair of governors. I answered that if the President were to be here to extend a welcome for the nation, it certainly was my duty, as well as my privilege, to endeavor to represent the gratification of the people of the State of New York that this meeting was to be held within our borders.

We greatly regret that the President cannot be with us; not alone because he could speak to you the welcome which should be national in its breadth, as this is an occasion of national significance, but because in his own personal work and achievements he has so largely represented the ideals of these associations in his labors of administration, and in the difficult work of our courts. We regret very much that we could not welcome him as he would welcome you. But the people of the State of New York do most heartily greet you and express their pleasure that you have reached this time of commemoration, when in the case of the Historical Association and the Economic Association you can celebrate twenty-five years of honorable and productive effort.

But, it is not simply by way of commemoration of what you have accomplished that I would speak, but rather extend to you the welcome which is in all our hearts because of what you represent in motive and

purpose. The past twenty-five years have been years of unexampled opportunity. The rewards of honorable endeavor have never been larger, and the inducements to work in the familiar callings of enterprise and profession have never been greater. I am addressing many who voluntarily turned aside from those paths which semed so sure to lead to affluence, to comfort, to positions of distinction in the commercial and professional world, that you might sacrifice your all to truth, and to the pursuit of what you believe to be the highest aim of man—the attainment of knowledge and its application to the problems of a free society.

With respect to this aim, you represent, what has been so happily said, "The writing on the other side of the table"; and in this community as in the communities from which you come will be found, to the credit of America, many of the brightest and the most favored intellectually and morally of the students of our universities, to whom there is no goal comparable with that of truth, and no stimulus so great as that which is supplied by the modern scientific method of pursuing it.

I should hail it as a fortunate thing for the people of this state and of this city if they gave to this meeting the significance which it deserves, not simply by reason of the achievements of the past, but because of the presence of so many representatives of this fine body of men and women throughout our country, whose labors are in truth our best assurance that the opportunities of democracy are not corrupting, and that we are still idealistic despite the practical advantages which are at our door.

We have perhaps great difficulty in obtaining a true historical perspective. It is very easy to magnify the importance of the days in which we live, to treat that

which is really ephemeral as of permanent value; to find in the tendency of the day, or of a decade, an indication of a permanent movement. We cannot estimate truly the value of the events of which we are a part, yet we must feel that we are living at a time whose problems give us a prophecy of the great difficulties which free society is to meet, and impress upon us the necessity of bringing to their solution the best that honest purpose and intelligence and skilled training can afford. We need to understand better than we have yet understood that in the work of the student and in the careful research of the historian and the studies of the economists are the natural and necessary aids of the practical administrator. Those charged with executive affairs must be—certainly should first be—students, that they may meet the demands of the moment, by the endeavor to apply a principle of action, which is the result of profound thought. Now I know that this is far removed from the purpose of those who would twist government and administration to some selfish purpose, and make it serve the ends simply of ambition, or of greed. But I thank Heaven that in this country those charged with administration are more and more realizing that the people are content with honest interpretation of facts according to the light of the interpreter, but will not put up with any attempt to cover improper designs by any sort of parade of either conservative learning or radical proposal.

The executives of our day may make mistakes. They may be exposed to just criticism because of a lack of merit in their recommendations or policies, but the American people, true to their instinct, will pardon, if they believe that there is a sincere endeavor to ascertain the facts; to deal with problems in the light of the facts,

with the sole object to be of service to the community; and that must be the test to be applied in all our difficult essays of administration.

We need in our law-making bodies study. The legislator should be a student of the legislation of the past, of the laws of other countries and of other states; a practical man because he is dealing with the application of theory to actual affairs, but a student with practical duties. And I rejoice that we are drawing more and more to legislative service men who have had special training in our schools, and men who look at the problems of the day in the light of the experience of the past, men who can take the long view as well as the short view.

We need men trained in history and in economics in our courts. Nothing is a greater mistake than to suppose that the judicial work is removed, as dealing with some exact science, from economic problems and historical reflection. As a distinguished judge said in my hearing the other evening, in the construction of statutes it is a very attenuated line frequently between judicial construction and judicial legislation, in matters of constitutional interpretation. In matters of constitutional interpretation, the economic theories, the extent of research, the acquaintance with the past, with great enterprises, and with formal efforts to solve problems, the general view as to future tendencies and desirable ends, will all have a most important bearing upon the conclusion that may be reached. What we need more than anything else at this time, it seems to me, is a general understanding that in administrative places, in our legislative halls and upon the bench, knowledge of history, of economic study, close relation to work that is being done in societies such as your own, is not only not to be regarded with

derision, but should be treated as a matter of first and invaluable importance.

Now I am very glad that we are so impressed with the difficulties of our situation that we are far more hospitable to the suggestions which come from universities and economic and scientific societies than we have been in the past. The crowding of business in our federal concerns, and in our state concerns, the tremendous scope of governmental activities, force themselves upon the attention of those charged with responsibility to such a degree that inevitably they turn for light to those who in the more quiet hour are able carefully to work, to plan, to study, and to reflect. We see evidences of this on every hand. I think the time will come when we shall actually have a tariff framed in accordance with expert study, and in the light of facts ascertained and known and read of all men, so that they may duly prepare the same in accordance with the just interests of the people and of those who may benefit by tariff legislation. In every department, wherever you may look, you find the necessity of getting the man who can tell you what is; who has a genius for getting at the real facts of the case; and who can come with a report upon those facts showing not only the skill of the master of research, but the common sense and poise and adjustment of the man acquainted with the difficulties of administrative work. There is no one in any position—chairman of a committee in the legislature, head of a department, executive of a state or of a nation, who does not count himself happy if he can come into close contact with the man who has had the rare opportunity to learn by painstaking investigation the facts of our social condition, all that pertains to these delicate human relations, so that remedies that may be needed may be devised in the light of

experience, and with a general acquaintance which must lie outside of the range of the busy administrator. It is very gratifying that at the time of our most pressing necessity there should be this greater coöperation between the man of thought and the man of action. And the men of thought are becoming more and more the men of action. We have less of doctrines to be maintained at all hazards, fewer schools with creed, fewer political and economic dogmas which must be accepted as a test of fellowship; and we have more and more the caution of the trained investigator who is unwilling to hazard a final generalization, knowing that there is yet so much he must learn before the last word can be spoken. And so the man of thought is anxious to have a chance to work, to see how the machinery moves; to get close to the actual affairs of public life, of social enterprise, of the various industrial occupations, and in the relations which give rise to these manifold questions. And the man of action on the other hand is getting to be more and more of the student. He is consorting more and more with those who have had the opportunity which the pressure of his own work has denied to him.

Once in a while a distinguished representative of the schools will go over into another field and talk of things of which he knows nothing, and again some man fresh from the field of action will attempt to give lectures which would really be suitable from one of academic part. But these illustrations are exceptional, and go to show the rule. They go to show this happy relation of the sense of mutual need and desire to coöperate which is so hopeful a sign at this hour.

You have in your various associations the opportunities to study many phases of the same question. There are, I do not doubt, many of you who rejoice in knowl-

edge for its own sake; who love to ascertain something apparently unrelated because of the joy of acquisition. And there is no finer joy than that of the scholar alone in his library rejoicing over a point that is all his own; that up to date no one else, he thinks, may have apprehended. But after all your work is practical. It is to be decided by practical advantages. You are simply bringing together many data from many laboratories, giving the result of an extended experimentation, not for the purpose of piling up the grave of foolish speculations in an immense mausoleum of annual reports, but in order that you may have something worth while to give to busy men, to administrators, to men who have the responsibilities of the work of the government, in order that they may be helped. And I would say not to the scholars, but to the men of affairs, study history. Even if it is superficially studied. We need its information; we need the poise that it gives. We cannot be firm and secure and well poised in the turmoil of the hour unless we have reviewed the activities and fought the battles of the olden times, and known of the ups and downs of former political critical hours. But the best of all is the encouragement, the consciousness that we have as we lift our eyes from the page of history that, difficult as have been the problems of other days, and of our own day, humanity is moving on; step by step a gain is made. We are the favored of all kinds. We today have the best inheritance in our generation that the children of men have ever enjoyed. And however doubtful may be the future, we cannot survey the past with its awful scenes of human cruelty, with its blackness of despair at times, without realizing the capacity that the human race has for the onward movement, and being satisfied that the advantages of this hour will never be

lost; but that, by the coöperation which you offer, by the intense desire of the people at large that all should be done to conserve honorable conditions, widen opportunity, lessen misery, and enlarge happiness we are destined still to continue on the upward path until we get somewhere near the goal which has been the dream of the poets and the historians and the scholars of the bygone days.

MR. CHOATE: By virtue of the power vested in me as Chairman of this meeting, I now declare the meeting closed.

# OBSERVATION IN ECONOMICS

ANNUAL ADDRESS OF THE PRESIDENT

DAVIS R. DEWEY

In presenting the subject, Observation in Economics, it is not intended to revive the old discussion of the relative merits of the deductive and the inductive methods. I desire to avoid controversy, and shall therefore grant that political economy is "essentially hypothetical in character"; and, for the sake of harmony, I am willing to take oath to Jevons's statement that "however useful may be empirical knowledge, it is yet of slight importance compared with the well-connected and perfectly explained knowledge, which constitutes an advanced and deductive science." But while there is no intention of contrasting the relative importance of abstract reasoning and observation of facts, it will also be taken for granted that the expert in hypothesis welcomes observation and the accumulation of facts, either to verify the propositions which have been advanced or to lay a substantial basis for further speculation.

It is assumed then that there is no jealousy between these two co-workers, theory and observation; and that each ungrudgingly recognizes the services of the other. It is also assumed that an unrelated and unrelatable fact is rubbish, fit for the waste basket; and that an hypothesis unsupported by fact is a spirit of mischief which deserves eternal imprisonment.

The activity which is displayed at the present time in the collection of facts relating to the interests of the economic life may well excite admiration. In no department of human effort is there greater ardor. It is characteristic of the work of government bureaus, legislative

committees, judicial investigations, commercial and philanthropic organizations, endowed trusteeships for research, magazines whose curiosity penetrates into the remotest corner, as well as a host of unattached students. Great progress has been made in the past twenty-five years. Although the domesday survey mapped out in the celebrated census of 1880 was a notable achievement, the range of observation since that date has been vastly extended. We know how many eggs were laid in Alaska; we measure the glass surface of florists' establishments; we have laid bare the balance sheets of the counting room; in our census we distinguish between one and two-seated sleighs; we can tell the proportion of checks to other monetary media; we know how much gold is consumed in dentistry; we have explored the mysterious labyrinths of monopolies and large industrial corporations; we have records of accidents and strikes; we have studied analytically the causes of poverty and degeneration; we have observed the physical and mental condition of children and have made record of the food they eat and of the hours they sleep.

Activity in observation does not mean that the work is well done, or that there is an intelligent consideration of the means to an end. Notwithstanding the activity, we are disposed to distrust the accuracy of much of the descriptive and statistical data thus collected, and we seek in vain for material which is wanting. Examples will be readily called to mind. We are still in doubt as to the exact changes in rates of wages for equivalent amounts of work performed; we still have a misgiving as to the variations in prices, although we freely admit that this is giving way to confidence; we are still in the dark as to the cost of production of the staples of consumption; we still are unable to frame reliable survivorship tables for lack of statis-

tics of births; and we still want important monetary facts in order to deal intelligently with the currency problem. But aside from omissions, there is the confusion in the facts which are now available. Well may we long with Professor Clark for the "discovery of facts which mean something and are capable of orderly arrangements and interpretation." Otherwise, as he says, "there is danger of collecting a mass of information so vast and chaotic that it will be useful chiefly as a means of moral discipline for the baffled student."

For the present difficulties it seems to me that we are largely to blame. In devoting attention so exclusively to "determining what are likely to be the immediate and ultimate effects of various groups and causes", economists have lost sight of a certain share of their elementary responsibilities, and because of this the science suffers. It is not to be inferred, however, that economists have shirked intentionally. I believe they appreciate the need of observation and exact data, and that never were they — so far as their reasoning goes — more free from dogmatizing than at the present time; but in the more absorbing interest of abstract processes, they have quite naturally failed to become acquainted with the methods of the work of their — I will not say neighbors, but servants who provide the facts.

Consider the recent systematic text-books on political ecomony. The method of exposition is largely through abstract reasoning; some of them, indeed, may fairly be termed treatises in applied psychology. And here again, I have no complaint to offer. It is probably the best method of presenting the subject as a scientific body of knowledge, but this method does not necessarily involve the use of facts except in most general terms. The ordinary reader does not realize that these general affirmations are based

upon the assembling of a large number of concrete units which have been so frequently observed and recorded that they have lost their individual identity and become merged into a generalization which appears as an abstract formula instead of a familiar vitalized phenomenon. Again this is no criticism of the method; it is true of all scientific exposition, including natural and physical sciences. But what are the consequences?

Other sciences have their laboratories with an army of observers and experimenters. In nearly every instance the abstract reasoner is himself an observer and experimenter. He is, at any rate, sufficiently skilled in observation and experimentation to guide and check the observations of his assistants. It is agreed, however, that political economy cannot use a controlled experiment as one of its tools, and that in so far it is not to be compared with the physical sciences. It is, moreover, agreed that observation in the field of economic life is extremely difficult, but no one, it is to be presumed, will admit that because of this difficulty observation is to be abandoned. So far as I am aware, no one has proposed this; although, because of this obstacle, some have despaired of there being any true science of political economy. If we refuse to accept this discouraging alternative, we must have observation, difficult though it may be. If this be conceded, the subject has two practical aspects, first the need of finding a place for its exercise in our courses of instruction, and, second, the need of directing and improving the vast amount of observational work in the interest of public welfare.

The subject of economics is taught to an increasing number of youth, and the growing interest is likely to continue. The pedagogical responsibilities are thus becoming more and more serious. All will agree that

accurate observation is a desirable object of educational effort, and that the student should receive some instruction which will enable him to recognize and classify the facts of economic life. And it is here that writers of systematic treatises might very properly in their introductory chapters place greater emphasis upon the character and service of observation. As a rule, our text-books dwell upon definitions, methods of reasoning, the relative value of deduction and induction, the application of mathematical ideas, and the scope of economics as distinguished from cognate sciences; but give very little attention, if any, to the part which observation plays, its importance and its limitations.

The instructor has at least one, if not all, of three ends in view: (1) The development of mental power on the part of the student irrespective of the acquisition of any particular facts; (2) the acquisition of a certain number of useful facts in regard to the business world, irrespective of their immediate relation to general principles; and (3) a mastery of the principles and a knowledge of the facts so that the future citizen can apply himself with some degree of gratification to himself, and some degree of benefit to the world, in the explanation of economic problems as they press upon him. At present these aims are imperfectly met. It is generally acknowledged, I believe, by teachers that the method of instruction is unsatisfactory, and, in so far as the instructor follows the text-book, the student too frequently agrees with this judgment. This is a natural consequence of existing conditions. The student by previous training is unable to assimilate the psychological generalizations dogmatically assumed in the text-book exposition; and the facts which are supplied by the instructor at irregular intervals, in unequal doses ranging from a single phenomenon to a

mass, chapter-deep, culled at random both as to time and as to territory, do not fit into a system of reasoning so as to make a lasting impression. As a result the student leaves the subject with but a hazy notion of the science as a whole; and, what is worse, has not made an adequate gain in mental power through the training of his faculties in abstract reasoning.

For my part, notwithstanding my interest in the descriptive characteristics of the economic life, I am often drawn to the conclusion that for the sake of the student it would be better to accept economics as a deductive science pure and simple, and treat it as a series of rigorous exercises in abstract reasoning, rather than to perpetuate the disconnected, mixed, and incongruous method which so many text-books impose upon us today. The doubt is prompted because we find so much apparent variation in the abstract reasoning. It may be that this is an unfair judgment, and that there is a larger content of accepted reasoning that I have implied; but, if this is true, the language of exposition and the terminology employed have so disguised the familiar concept that it appears to be a stranger.

We may hope, however, that progress will be made toward agreement even within a limited field. When this is accomplished, and there is a sufficient amount of material presented in a form which can be safely turned over to the student, from which he can with confidence gain a knowledge of the fundamental principles and their application as derived by logical processes — when this is done, our problem will be greatly simplified, for the writer or the teacher will no longer be harrassed by the feeling that in some way he must make good the uncertainties of his reasoning by thrusting into his exposition a certain amount of useful knowledge relating to

the economic life. The study and presentation of the facts will then occupy a separate field of its own; its cultivation will be carried on by independent and intelligent methods for certain definite, clearly prescribed ends. Pending this happy deliverance, however, what can be done for the student, and what can be done to save observation, induction, and the significance of facts so that their importance will not be wholly lost?

Taking political economy as it is written, it is that body of knowledge which treats of the relation of the wants of men to things which will gratify these wants. Even many of the authors who retain the classical definition of political economy as well as the traditional division of the subject into four parts, in which emphasis is put upon the physical world instead of psychical wants, are influenced by this conception, and apparently would prefer to treat the subject from the latter point of view. Possibly they hesitate to make the change because it breaks with past literature, or possibly because they feel that under the newer treatment there is not the opportunity to use as large a supply of facts relating to the material world as they think desirable in order to retain the interest of their readers.

There are two fields for observation: first, the wants of people, and, second, the things which they want. The student understands far less in regard to this territory of wants than the writers appear to take for granted. Authors admit the importance of the classification and analysis of the wants. Selecting two recent text-books at random, from one I read that the question merits long and careful study; and from the other: A first step is a clear analysis of the character and motives of the business man. And yet the first of the writers states that the general answer to the question, What is the motive

force? is so simple that it seems almost self-evident, and the second writes: The motives to business activity are too familiar to require analysis.

If the present method of exposition is to persist, the student may well tarry for a longer period than the consideration of the few pages usually allotted to this topic demands. It is possible for the student to do practice work in classifying these wants. In his own experience he has a laboratory, and by observation he can add other data. Some of the text-books which are pedagogically provided with questions recognize in some slight measure the desirability of this process and the possibility of undertaking it. From my point of view the discussion of these questions, and the procedure to be followed for their analysis, should at least precede, if not in a large measure be substituted for, the text which is now given.

Why ask a student whether food, tobacco, medicine, whiskey, a pack of gambler's cards, or a wooden leg, is wealth; but rather, who wants food, whiskey, or a wooden leg? and why, and how much does he want the given wooden leg? From a consideration of wants alone, I believe that an extensive tract of economic life could be surveyed, a survey which would acquaint the student with a large mass of material arranged under a methodical scheme; and, what is perhaps of more importance, the acquaintance of these facts would give vividness and reality to the subsequent exercise in reasoning.

It will, however, be objected that it is not necessary to put a student through a prolonged course of wants in order to undertake the series of rigorous exercises in abstract reasoning; that observations on the six sacks of wheat are all that is necessary to grasp the idea of marginal utility and its related progeny. This may be granted, though with some doubt; but I assume that the

exponent of abstract reasoning wishes to find some place for observation and induction. If perchance the instructor is held up or temporarily barred from entering into the higher realm of abstract reasoning, may we not hope that, though chafing under restraint, he will apply himself to aiding the student in methods of observation, classification, and induction, and thus provide an expert guidance in a difficult art?

My complaint is not confined to those who approach economics from the standpoint of man's psychical nature, but includes those who enter from the other gateway and first view the physical world. Seldom does their guide take lodgings and acquaint his followers with the features of the country into which they have entered. He hastens on, stopping at a few traditional stations where supplies have been stored in advance for another day's march, but rarely permitting the tourist to stray far from the personally conducted party. The latter sees through the eyes of the guide: this is wealth, a beautiful picture; that is a free economic good, a mere daub, not worth seeing; this is competition, a work of Gothic architecture; that is property, a Roman ruin. And for tranquil observation of this much, they are often interrupted because of the insistent messages from their distant friends who began at the other end of the route and are urging them to hasten over to view the tropical sights of man's psychical nature.

What are economic facts? Our students are learned in defining and analyzing such terms as wages, price, income, profits, but how many of them know what is *a* wage, *a* price, *an* income, *a* profit? But few can distinguish a strictly accurate price observation. Is it a gross or net price? Has it a discount or a sub-discount? A spot cash or time credit price? How large a quantity must be

purchased to secure the price offered? Is it an open price, or restricted to a certain number of customers? Is it an artificial or natural price?

A mistake is made in inferring that the observation of an economic fact is an easy operation. Observation has only recently been regarded as an indispensable tool of the natural and physical sciences. But it will be said that everyone in these days has a wealth of economic information at his command, and that it is unnecessary to impose upon the student any special task in observation. A large number of the so-called facts lose their reality when translated into the language of the economist. Past experience appears to count for very little, and the student must begin to learn the art of observation with a new pair of glasses to correct the strabismus with which he has been previously afflicted.

Certain facts are like gold in placer deposits, readily detected and worked out; others, however, are disguised and hidden in a composition, and can be extracted only by ingenious methods. As a large part of the gold product of today is obtained by sulphide and cyanide processes which involve an expert knowledge of chemical properties, so an increasing number of facts need to be assayed, and can be analyzed only by a knowledge of the economic material in which they lie imbedded. Nor would I imply that all complex relationships can be disentangled, but what we ought to insist upon is that the observations we do rely upon shall be indisputable. To change the figure, we erroneously take it for granted that our economic facts are already sorted, neatly arranged in parcels, labeled and ready to be picked up as they are wanted. For the great mass of mankind this convenient possession does not exist. Rather they are scattered about at random, or heaped up in piles at every conceivable angle;

only the corners of many of them are seen; and if ever labeled at all, too frequently the labels have been misplaced.

Are we not rash in assuming that the concept, competition, is generally understood? And can it be understood until we ask *who* compete, *where* do the units compete, or to what degree *do* they or *can* they compete? The term monopoly is used as if there were no doubt as to its implication, and yet few recognize a monopoly when they meet it face to face in the broad sunlight, and many apply the term when it has no true significance.

Our observation is governed by our imagination. As the psychologist observes, one child sees in a stick a horse; another, a doll; and, we may add, under the influence of this fancy, creates around this stick an unreal world. One observer of a group of economic phenomena will see an industrial warfare in which each of the units is endeavoring to exploit his fellows; another in viewing the same picture beholds a scene of tranquillity in which each is following his own intent, and realizing his own individual desires. Each creates an unreality. We would not destroy the imagination of a child, but fanciful imagination is not the tool of science. In time the stick becomes to the child nothing but a stick and is evaluated as such; but for the adult there is no training which will dissolve the economic fantasy.

Moreover, exact observation is necessary to serve as the basis of deduction. If the facts are vitiated, how can abstract reasoning test its results; how can it dare to attempt new flights? If Newton had not been able to distinguish between an apple and a puff-ball, it is probable that his famous hypothesis would have gone unprovoked. Imperfect vision is responsible for much of the economic reasoning associated with schools of propaganda at the

present time. The error of Henry George, socialists, or extreme individualists is not so much in their reasoning as in defective observation. Too many of them cannot distinguish between puff-balls and apples.

At the present time we are interested in currency reform, an interest largely stimulated by certain phenomena witnessed in 1907. For a satisfactory discussion of this question there are three elements to be considered: first, the phenomena of 1907, that is, the facts of the panic; second, the causes; and, third, the remedies. The first is a matter of observation, the others involve our reasoning faculty. Do we know the fundamental and elementary facts which are associated with this panic? One observer notes that the Hepburn Act was followed by a loss of confidence; another that it was succeeded by enthusiastic confidence and unbridled speculation; one observes that the phenomena of the panic were local, another that they were international, extending over four continents; one observes that the currency was inelastic, another that not for many years had there been so much expansion; one observes that an excessive amount of wealth had been diverted to enterprises which were not immediately productive; another that the amount was not relatively large; one observes that Wall Street speculation was at a comparatively low level in the two years preceding October, 1907; another that stock exchange operations were exceedingly violent; one observes that the panic was the severest within the memory of man, another that it was not so disastrous as those of 1893 and 1873.

Now these are questions of fact; and until these differences are reconciled and agreement as to what really happened is attained, how can we profitably busy ourselves with judgment as to causes or remedies? If we spent as much time in dissecting the panic of 1907 and

noting what really happened in the twelve-month previous as we do in devising ingenious machinery for establishing a new currency system, we might perhaps move more slowly; but later we should at least have the assurance of knowing what we wish to accomplish.

The complexity of our phenomena appears to defy accurate observation. There are so many variables that it is difficult to separate the mass into its component parts. The economist is asked: Is the present increased production of gold responsible for the advance in prices? and replies: I do not know; there are so many forces at work which might affect prices, I cannot be sure which is the determining cause. A braver answer, and I believe a more accurate explanation of ignorance would be to attribute it to inadequate observation. If our knowledge of past experience was enlarged, and every known instance of increased prices was observed with simultaneous observations of demand for commodities; of restricted supply; of the nature of the commodity which was priced; of the cost of production, and the volume of money; a part at least of the error might be eliminated by adopting the well known rules of logic which other sciences employ, as the differential method, method of avoidance, method of compensation, and so on. Great honor is due to Mr. David A. Wells for attempting single-handed the solution of this problem by one of the methods indicated, and the example of his analysis ought to inspire others to a similar task. As Mill says, "The order of nature as perceived at a first glance presents a chaos followed by another chaos." But Mill is not dismayed. He continues, "We must decompose each chaos into single facts. We must learn to see in the chaotic antecedent a multitude of distinct antecedents, in the chaotic consequent a multitude of distinct consequents."[1] Nor am I

[1] Logic, Book 3, ch. 7, sect. 1.

advancing a plea for the piling up of more facts. Rather, if it were possible, would I destroy a large part of the so-called facts the existence of which is in reality an obstacle to progress. What we want is accurate facts. Many a monograph is non-usable because the observer was not trained in observation, did not perceive with clear vision, and did not record his data with precision.

A host of students are now engaged in the field of descriptive economics. Some are disposed to think that too many have been diverted into this field. The mistake of these ardent workers is not in entering upon this work, but rather in failing to recognize that it requires a special preparation,—that it has an art of its own, to observe, measure, and separate the phenomena which constitute the object of their research. Possibly the economist thinks that he is not concerned with these observational workmen; but we have a practical situation to meet. Many are not gifted to engage in abstract reasoning, and others are not attracted to devote their energies to this field of intellectual activity. It is impossible to check this interest, but is it not possible to make the work of these enthusiastic recruits more effective?

Our subject, however, has another aspect which concerns the public interest rather than the methods of pedagogical instruction. As has already been observed, there is actually existing an enormous amount of observation in the field of economic activity. The scope of economic facts is so vast, the data are so scattered, and the analysis of these facts is so complex, that it cannot be expected that the task of observation will be carried on by individual enterprise alone. Much of it is assumed by government or subsidized endowment. This has been so in the past, and must be increasingly so in the future. If this be true, the only way to secure a scientific supervision

of the process of observation is for governments to put the work into the hands of scientists, or at least to call them into consultation. It may be said, however, that the simple collection of economic facts does not require the services of experts trained in economic analysis; that the gathering of data in regard to production, prices, consumption, etc., demands intelligent and honest administrative effort, but not necessarily a specialized economist. The objection is ill-advised; the economist and the sociologist ought to make their influence felt at every stage from original observation to final generalization. Because of this neglect at the initial step, we are now swamped by a mass of material which in part is rubbish, of no use to anyone; in another part of so little use that it does not justify the expense of collection; and which in still another considerable portion is so inaccurate that it is open to suspicion, and cannot be safely used for purposes either of induction or deduction.

Suppose an economist should endeavor to frame a scheme of facts which he requires for his economic generalization and processes of reasoning, what facts would he demand? Under present conditions he has at hand an enormous mass of material supplied by statistical bureaus which in order to justify their maintenance are not compelled to meet an expert demand. They furnish data which can be easily gathered together, or which will conform to ideas of serviceability long since abandoned, or which will make an impressive showing from the standpoint of quantity. Let the economist go through the mass of statistical documents and reports of commercial, industrial, and charitable organizations, and direct his attention solely to the question,—in what way can this fact be used, in what way is it of service, or in what way can it be analyzed so that it will be of service in the near fu-

ture, how much would receive the mark of approval which would justify its retention? Is it too much to say that a considerable part would be passed over? Supply of material is now furnished under monopoly conditions, and not under the stress of competition,—a force which quickly discards useless effort. Demand ought to control the supply, but, as it is, supply mystifies and befogs the demand. Monopolistic production, generously subsidized, of all forms of production requires expert direction.

No one individually is to blame for this condition of affairs. The fault is in the system. The economist has been living far apart from the official observatories. Busy with the analysis of motives, psychological effects, gratifications, welfare subtly conceived as a product of dynamic forces rather than of static conditions, engrossed with detecting movements, their direction and significance, and with the study of differences instead of the composition and characteristics of the things compared, he neglects his humble co-workers whose business it is to record economic phenomena in so far as they admit of record. The observer has consequently been left to his own devices; sometimes he is directed by the mandate of a legislature which rarely seeks expert advice; sometimes he has been prompted by a passing interest derived from a newspaper discussion; sometimes by a personal whim. More frequently he has proceeded along the line of least resistance, recording data which could be easily secured, irrespective of any other quality. As a nation we are altogether too credulous, and have yet to learn that columns of figures are not statistics.

In making these statements I would not forget the valuable work which many bureaus are doing. There is an increasing tendency on the part of governments, whether national, state, or local, to call into service trained stu-

dents to direct the administration of statistical affairs. In many departments desirable reforms have been effected, and yet too often somewhere in the administration of these offices there is a cog missing which makes the results unsatisfactory. Experts at the top may secure better methods of interpretation, but they alone cannot secure correct and accurate observation of the primary data which are to be interpreted. Attention must be given to the competency of the field workers, the factory operatives, in order to justify the laborious inferences of the experts who use the raw material.

Nor would I appear to slight the intensive and descriptive studies of those who have made noteworthy contributions to economic theory. Many of these have observed to good purpose, as in transportation, taxation, agriculture, and human vitality. Such activity proves that we are fortunately supplied with competent directors. It only remains to organize this potential force so that it will mark out and conduct an intelligent program whereby the nation can learn to know itself.

## ANNIVERSARY MEETING, UNIVERSITY HALL, COLUMBIA UNIVERSITY, TUESDAY, DECEMBER 28, 1909, AT EIGHT P. M.

The President: This meeting has been set aside as an anniversary gathering at which we are to hear something of our origin, and receive also appreciations and congratulations. At a birthday party we do not look for criticism—nor is it a time for too serious reflection.

Most of us gladly forget our birthdays, but in the case of an organization like this which is so rapidly increasing in numbers, in influence, in public respect, every added year brings with it pride, and we can well take one session to hear something of our history, and if necessary to congratulate ourselves. In view of the length of the program, I shall not take any time in introductions, but in presenting the first speaker I should like to pay my own tribute of appreciation and regard for the work which he did for this Association. I happened to be one of the twenty-one who gathered at Saratoga when the organization of this Association was first discussed. Of those twenty-one, fourteen are now living. I think there are not more than three in this room who were present at that time.

Dr. Ely will now give an account of the history of the American Economic Association. I take great pleasure in introducing Professor Richard T. Ely, of the University of Wisconsin.

## THE AMERICAN ECONOMIC ASSOCIATION 1885—1909.

### With Special Reference to Its Origin and Early Development.

### An Historical Sketch.

RICHARD T. ELY

The American Economic Association was born September 9th, 1885, and we are gathered to celebrate its quarter centennial in the same place and at the same time that the American Historical Association celebrates its quarter centennial, although our Historical brothers founded their Association a year earlier. This compromise in our favor we graciously accept. We are glad that our colleagues in this related field of knowledge so readily perceive that twenty-four years of our life are equal to twenty-five of theirs.

It is my purpose in this paper to give an historical sketch of the genesis and development of the American Economic Association. The entire history cannot be presented at this time and its preparation is a more formidable undertaking than I had at first anticipated; for after all it includes the greater part of the history of economics in the United States. What is of special significance is the preparation of the history of the foundation of the Association and of its earlier days. The time is ripe for such a history based on documents and recollections, the latter to be tested by reference to the participants for critical examination, the chief actors in this early history being nearly all still alive—fortunately still active and vigorous—for the founders were young men of twenty-five to thirty or thereabouts, and now it cannot be denied twenty-five years older. It is my purpose to present such a history—but pray do not be

alarmed—only a minor part of it now. All the details could scarcely be followed in a spoken address, which would also be prolonged beyond all reasonable length. Should I attempt it, perhaps the speaker would still be speaking when the rays of the morning sun should be breaking—and you—where would you be? What especially interests us here and now we find in the more general features—the broad outlines—the essential significance of the foundation of the Association. My colleague in the Johns Hopkins University, the late Professor H. B. Adams, most helpful in the organization of our Association, used to urge brevity upon his sometimes too prolix students—the budding historians who have taken twenty-five and a half years to live twenty-five; and in exhorting them to get at the heart of things would say: "Now let us have the milk in the cocoanut!"

What did the American Economic Association mean to those who established it? They declared their purposes at the time in a constitution of which the most significant parts were included under "Objects" in Article II, and under "Statement of Principles" in Article III.

The objects do not require any very lengthy treatment, although each one of them had a real significance at the time. They were:

1. The encouragement of economic research.

2. The publication of economic monographs.

3. The encouragement of perfect freedom in all economic discussion.

4. The establishment of a Bureau of Information designed to aid members in their economic studies.[1]

[1] The Bureau of Information performed a very useful function for a number of years in aiding members scattered throughout the country in the selection of works on topics in which they were interested, in giving information about leading thinkers on various

The much debated and still more misunderstood "Statement of Principles" reads as follows:

## ARTICLE III.

### STATEMENT OF PRINCIPLES.

1. We regard the state as an agency whose positive assistance is one of the indespensable conditions of human progress.

2. We believe that political economy as a science is still in an early stage of its development. While we appreciate the work of former economists, we look not so much to speculation as to the historical and statistical study of actual conditions of economic life for the satisfactory accomplishment of that development.

3. We hold that the conflict of labor and capital has brought into prominence a vast number of social problems, whose solution requires the united efforts, each in its own sphere, of the church, of the state, and of science.

4. In the study of the industrial and commercial policy of governments we take no partisan attitude. We believe in a progressive development of economic conditions, which must be met by a corresponding development of legislative policy.

NOTE: This statement was proposed and accepted as the general indication of the views and the purposes of those who founded the American Economic Association,

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sides of controverted questions, in giving suggestions as desired in regard to courses of reading, and in answering all sorts of questions in relation to economics. It supplied a real need at a time when there were comparatively few economists in the country, and, compared with recent years at least, a very meager American literature, while a great many desired to improve their education in economics. The Bureau was practically the secretary's office, and added materially to his duties; but he felt well repaid in fostering in this way the rapidly growing interest in economics.

but it is not to be regarded as binding upon individual members.

But constitutions require interpretation. We do not understand their real meaning until we know how they come into being. Written records give us three stages in the evolution of our Statement of Principles, followed by its final disappearance which we may perhaps call its fourth stage—if non-existence is a stage of existence.

Before the American Economic Association was born, Dr. Edmund J. James, assisted by Professor Simon N. Patten, proposed the formation of an organization to be called the Society for the Study of National Economy. The draft of a constitution which was worked up by these two gentlemen reads as follows:

SOCIETY FOR THE STUDY OF NATIONAL ECONOMY.

It is the purpose of the Society for the Study of National Economy to promote the following ends:

1. To encourage the careful investigation and free discussion of the special problems of our national economy.

2. To secure the publication of economic monographs prepared by men whose special training for the work will ensure such a treatment of the subject as will be worthy of public attention.

3. To combat the widespread view that our economic problems will solve themselves and that our laws and institutions which at present favor individual instead of collective action can promote the best utilization of our material resources and secure to each individual the highest development of all his faculties.

Believing that an organization of those who favor these objects will assist in promoting their growth and recognizing that a general unity of sentiment is necessary to a hearty coöperation, the Society has adopted the following platform to indicate its general attitude toward our social and economic problems.

I. The state is a positive factor in material production and has legitimate claims to a share of the product. The public interest can be best served by the state's appropriating and applying this share to promote public ends.

II. Sovereignty resides in the people and is one in its nature, whether exercised by a local or general government. The actual economic and social conditions of a country determine whether is-

sues are of a local or national importance and whether, therefore, a given function should be assigned to municipality, state, or nation. The constitutional distribution of powers should conform to that distribution most in harmony with the social and economic conditions of the country.

III. True economy in goverment affairs does not necessarily consist in a reduction of public revenues, but in such a distribution and administration of public expenditures as will in the most efficient manner promote public ends.

Good administration cannot be expected in a society where the people view the state as a merely negative factor in national life, and where, therefore, they attempt to remedy administrative evils by limiting government action instead of purifying and rendering efficient government service. Our own history proves that attempts to secure economy by diminishing public expenditure and to better legislation and administration by narrowing the scope of their action result in a marked deterioration in the character and ability of the men who make and administer our laws.

The true method of obtaining purity and economy in our administration is through the assumption of its proper functions by the state, since the consequent importance and dignity of government service would force public attention, attract the best class of citizens to the consideration of public affairs, and necessitate the greatest economy in administration.

IV. Our present enducational system has failed to maintain that standard of intelligence and industrial efficiency below which no community can allow its members to fall without impairing the rights and endangering the welfare of other communities.

Its defects are owing partly to the selfishness and partly to the inability of local authorities. We are therefore compelled to look to the national government to protect the rights and interests of the whole against the shortsightedness and selfishness of the parts, and to supplement by national grants of money the efforts of each locality.

V. The present problems of our economy which arise from the increasing differentiation of the laboring and capitalist classes must be studied and solved with reference to the general interest of the community as opposed to the interest of either or both classes.

Public interest demands that the sanitary and industrial conditions of the laborer shall be such as will enable him to develop in himself and perpetuate in his family the qualities necessary to make him a desirable citizen of a great republic. Such conditions can only be realized when the laborer has an adequate compensation and such limitations of the hours of labor as will leave him opportunity for mental and moral growth and thus prevent him

from sinking into a mere mechanism. The utilization of our material resources demands that the qualities upon which the accumulation of capital depends shall be developed in every class of society. The growth of such qualities is hindered by existing laws, which favor that type of production on a large scale which can flourish only by combining large capital in a few hands with cheap and inefficient labor instead of that system which would naturally grow up in our national economy of smaller industries so distributed as best to utilize our material resources.

It is the duty of the state to enforce those measures which will assist in realizing all the conditions of a sound industrial system against both the greed of the capitalist and the shortsightedness of the laborer.

VI. The arbitrary discrimination of our transportion companies not only violates the acknowledged rights of individuals and communities, but also tends to develop an artificial organization of industry by which labor and capital are diverted from those points having natural advantages to such as are favored by the interest or caprice of great corporations. It is only by government intervention that these rights can be maintained against the encroachment of great corporations actuated only by private interest; and until they have been secured it will be impossible to develop a sound industry.

VII. The best development of our national resources demands that a certain proportion of the surface of the country be covered with forests; that a suitable rotation and variety of crops be observed; that the most approved machinery be applied; and that the best breeds of live stock be utilized. To attain these ends it is necessary that the land of the country shall be in the hands of a class of resident owners who possess capital enough of their own to equip the farms adequately and to develop their resources in the best manner. Our present system of land laws permits individuals and localities, led by motives of private interest, to reduce the amount of forest land below the proportion which it should bear to arable land. They favor the acquisition of the land either by a class of farmers so inadequately supplied with capital that the pressure of present indebtedness compels them to adopt a system of culture which, looking to present gains, exhausts the soil; or by a class of non-resident owners in whose interest that type of tenants is developed, who, with a low standard of life, can obtain from the soil the greatest return for the landlords. It is the duty of the state to insist that in every locality there shall be reserved for forests such a proportion of its area as the public welfare demands, and to change our present laws so as to favor the acquisi-

tion of the land by those whose interests in management will coincide with those of the public.

VIII. The vast extent of our territory and the great variety of our soil and climate clearly indicate that the prosperity of each section can be best promoted by developing its own peculiar resources and relying on other sections for those commodities in the production of which it is naturally at a disadvantage, while the increasing interdependence of all the parts of our industrial economy upon one another makes it impossible for the industries of one section to be developed to the highest extent except upon the basis of a similar development in those of every other section. It is therefore to the interest of each locality to favor a close economic union with other localities and to lend material aid in developing their resources. Among the most obvious methods of serving the common interest are the following:

1. The collection and dissemination of information in regard to national industries and the best manner of developing them.

2. A careful investigation of our mineral and agricultural resources by means of accurate surveys of the geology, flora, and fauna of our territory, so that we may best economize our mineral wealth, discover injurious animals and plants, prevent their propagation, and preserve and develop those which are likely to prove useful.

3. The establishment of experimental stations where new processes may be discovered and tested, new industries developed, and the relative value of different crops and breeds of animals may be determined.

4. The positive encouragement of the introduction of the best processes and the most sutiable crops and live stock by the establishment of expositions and fairs, and by such bounties and exemptions as seem best calculated to secure the desired end.

While individuals and societies may contribute something toward these results, yet, owing to the haphazard character of their efforts, no adequate assistance can be expected from them. It is, therefore, not only beneath the dignity of a great nation, but also contrary to its interest, to rely upon the charity of its individual members for the promotion of so necessary an end as the symmetrical development of its material resources.

The main points in the constitution of their proposed Society are the encouragement of investigation, and free discussion; a vigorous protest against the *laissez-faire* philosophy both in general and in various particulars mentioned; the insistence that economic functions should

be distributed among municipalities, states, and nation in harmony with our social and economic conditions; emphasis upon the nation in educational matters; a statement of the belief that the state (in its generic sense), that is, the collectivity, is rightly entitled to a share in the social dividend because "it is a positive factor in national production;" a declaration that this share should be used to promote public ends and that "our own history proves that attempts to secure economy by diminishing public expenditures and to better legislation and administration by narrowing the scope of their action result in a marked deterioration in the character and ability of the men who make and administer our laws;" progressive labor legislation; government control (not ownership) of transportation companies; especially to be mentioned, the elaboration of the idea of the wasteful use of our national resources and clear emphasis upon the importance of conservation; finally, we may notice, the declaration in favor of industrial as well as agricultural experimental stations.

Among the "Ends" notice number three: "To combat the widespread view that our economic problems will solve themselves and that our laws and institutions which at present favor individual instead of collective action can promote the best utilization of our national resources and secure to each individual the highest development of all his faculties."

One especially important paragraph in this draft of a constitution is the following: "Believing that an organization of those who favor these objects will assist in promoting this growth, and recognizing that a general unity of sentiment is necessary to a hearty coöperation, the Society has adopted the following platform to indicate its general attitude towards our social and economic problems."

It was proposed to organize a society of persons of a similar economic and social philosophy, on the one hand to carry on further scientific studies, and on the other hand to work for general betterment along indicated lines. The elaborate declaration of principles, I am positive, was not looked upon by its authors as a creed binding even upon themselves for a day

The proposed organization, "The Society for the Study of National Economy", did not meet with sufficient encouragement to lead to its formation.[2] But having already become interested in the idea of an association of American Economists, the present speaker in consultation with friends and colleagues undertook to draw up another statement of "Objects" and "Declaration of Principles" and to enlist the support of his fellow economists. In this he was especially assisted by his colleague, the

[2] I find in my correspondence prior to the formation of the American Economic Association only two allusions to the proposed "Society for the Study of National Economy", and one of them is in a letter from Dr. Patten. The principal effect of this society would seem to be that it was in a sense preparatory, a stirring of the soil, and also that it may have exerted an influence on me in my draft of the Statement of Principles; and exactly how great that was I cannot say after all these years. I can, however, safely say that my effort was not all a rival one. I had already intended to endeavor to form an association of American economists before the effort of Dr. James and Dr. Patten took any definite shape. That sort of thing was in the air, so to speak, at the Johns Hopkins University and was encouraged by the authorities there. When, however, they sent out their draft of a constitution, I held back until it became absolutely certain that success could not be achieved along that line; and then took the initiative again. All this is a minor matter and perhaps of antiquarian interest only; but it is well, if it is mentioned at all, that we should have the precise historical truth.

As an indication of thoughts stirring in the minds of young Americans who were more or less pioneers, the draft of the constitution of the proposed Society for the Study of National Economy has very great significance in the history of economic thought.

late Professor H. B. Adams, who the year before had been chiefly instrumental in organizing the American Historical Association. Adams had a genius for organization and was probably never happier than when bringing an institution into existence. Dr. James also coöperated most generously and effectively, never expressing the slightest concern for any egoistic ends, but simply for the grand purpose. No one was more energetic and loyal in coöperation, more diligent in assistance in every detail, than Dr. E. R. A. Seligman; and numerous others may be mentioned and are mentioned in No. 1 of the Publications of the American Economic Association, which consists of the Secretary's "Report of the Organization of the American Economic Association."

But we are anticipating somewhat the march of events. It seemed that one reason why the proposed Society for the Study of National Economy did not come into existence was what was felt to be an undue elaboration of aims, but there was apparently a good deal of sympathy with the main thoughts of the program—with its underlying economic philosophy—consequently, in drawing up a Statement of Objects and Declaration of Principles for a society to be called "The American Economic Association", I made a much simpler program, but one in general harmony with the social philosophy of James and Patten, although differing at least in two important particulars: (1) my statement emphasized historical and statistical study rather than deductive speculation; (2) my statement laid less stress upon government intervention and was "toned down" in the direction of conservatism on the whole. The prospectus sent out reads as follows:

## AMERICAN ECONOMIC ASSOCIATION.

### OBJECTS OF THIS ASSOCIATION.

I. The encouragement of economic research.

II. The publication of economic monographs.

III. The encouragement of perfect freedom in all economic discussion.

IV. The establishment of a bureau of information designed to aid all members with friendly counsels in their economic studies.

### PLATFORM.

1. We regard the state as an educational and ethical agency whose positive aid is an indispensable condition of human progress. While we recognize the necessity of individual initiative in industrial life, we hold that the doctrine of *laissez-faire* is unsafe in politics and unsound in morals; and that it suggests an inadequate explanation of the relations between the state and the citizens.

2. We do not accept the final statements which characterized the political economy of a past generation; for we believe that political economy is still in the first stages of its scientific development, and we look not so much to speculation as to an impartial study of actual conditions of economic life for the satisfactory accomplishment of that development. We seek the aid of statistics in the present, and of history in the past.

3. We hold that the conflict of labor and capital has brought to the front a vast number of social problems whose solution is impossible without the united efforts of church, state, and science.

4. In the study of the policy of government, especially with respect to restrictions on trade and to protection of

domestic manufactures, we take no partisan attitude. We are convinced that one of the chief reasons why greater harmony has not been attained is because economists have been too ready to assert themselves as advocates. We believe in a progressive development of economic conditions which must be met by corresponding changes of policy.

A mimeographed circular containing the draft of a constitution was distributed widely among the economists who might be supposed to be in sympathy with it, generally among the younger group of economists; and it was proposed to gather at Saratoga in September 8-11, 1885, in connection with the American Historical Association (to which nearly all the economists belonged), in order to form our Association. The response to the invitation was general. On September 8, a call signed by H. C. Adams, J. B. Clark, and R. T. Ely, was read at a public meeting of the Historical Association, and the call invited those interested to meet at the Bethesda Parish Building, at 4 p. m. of that day to take into consideration plans for the formation of an American Economic Association. The printed report mentions the following as names of those who among others were present: Hon. Andrew D. White, President C. K. Adams, Professor H. C. Adams, Professor R. T. Ely, Professor E. J. James, Rev. Washington Gladden, Professor E. Benjamin Andrews, Rev. Samuel W. Dike, Professor J. B. Clark, Mr. V. B. Denslow, Professor Alexander Johnston, Dr. E. R. A. Seligman, Professor H. B. Adams, Mr. F. B. Sanborn, Miss Katharine Coman, Mr. Davis R. Dewey, Edward W. Bemis, Ph.D., Mr. John A. Porter, Clarence Bowen, Ph.D., Professor Herbert Tuttle, Hon. Eugene Schuyler.

The meeting was called to order by Dr. James, Professor H. C. Adams was made temporary chairman, and

the present speaker temporary secretary. The acting secretary read a paper elaborating his ideas as to the objects and platform, and this was followed by an animated discussion in which a variety of opinions found expression. This is already a matter of record.[3] Several were entirely prepared to accept the proposed draft as read, but others thought a modification wiser, and it was referred for consideration to a committee consisting of five members, namely, H. C. Adams, Washington Gladden, J. B. Clark, Alexander Johnston and R. T. Ely; and at the same time a committee on organization was appointed by the chair consisting of E. J. James, H. B. Adams, and E. B. Andrews.

The next meeting was held at 4 p. m., September 9, 1885, also in the Bethesda Parish House. The chairman of the Committee on Organization presented a plan which, with slight modifications, was adopted. The Object and Statement of Principles as revised by the committee were slightly modified as a result of the debate on their passage, and were adopted in the form already read to you.

And the American Economic Association was born September 9, 1885. On September 10, the following officers were elected:

President, Francis A. Walker, LL.D.,
Massachusetts Institution of Technology.
First Vice-President, Henry C. Adams, Ph.D.
University of Michigan and Cornell University.
Second Vice-President, Edmund J. James, Ph.D.,
University of Pennsylvania.
Third Vice-President, John B. Clark, A. M.,
Smith College.
Secretary, Richard T. Ely, Ph.D.,
Address Johns Hopkins University, Baltimore, M. D.

[3] Pub. of the Amer. Econ. Assn., Vol. I, No. 1.

Treasurer, Edwin R. A. Seligman, Ph. D.,
Columbia College; address 26 West 34th Street, New York.

It should be noticed that our Statement of Principles was never regarded as a creed. In the report of the secretary on the Organization of the American Economic Association, I find the following words: "This platform, it must be distinctly asserted, was never meant as a hard and fast creed, which should be imposed on all members, and least of all was it intended to restrict the freest investigation." If any one ever signed the Statement of Principles, it must have come to my notice, as I held the position of secretary for the first seven years, and I feel safe in saying that absolutely no one ever signed it, and that no officer of the Association ever asked any one to sign it. It was not intended to be signed and this reply was made by the secretary when once or twice a willingness to sign was expressed. The "note" printed with the constitution[3a] precisely expresses the situation.

The Statement of Principles, it will be observed, was a compromise and one in behalf of catholicity. First we have the detailed declarations of Professors James and Patten; then the broader and more general "Platform" proposed by the secretary; and finally the "Statement" adopted; each modification representing what has been called a "toning-down" process. The change was in deference to the fact that various views were represented in our membership and still more in the membership we hoped to get. We were anxious to win the great body of economists. While not all of the original members may have held precisely the views expressed in the "Statement of Principles", all certainly felt at home and comfortable in the Association; and it was hoped and expect-

[3a] See page 49.

ed that the Statement would oppose no barrier among students who similarly held the less pronounced views. We all considered ourselves scientific investigators and not propagandists.

What was its purpose then? Let us be perfectly frank. It had an inclusive as well as an exclusive aim. Like the earlier statement in the proposed Society for the Study of National Economy, it aimed to gather together like-minded men, congenial men who it was supposed could profitably work together. Not every economist was at first asked to join, although no economist who expressed a desire to join was refused enrollment. Our statement has doubtless puzzled and perplexed many because, looking upon it as a creed, they asked themselves, "How could this creed proceed from those animated by scientific ideals of freedom?" It was, however, simply a statement showing conclusions which up to that time those of us who were most instrumental in founding the Association held. Along with our scientific aspirations, as already stated, we had as a general aim the accomplishment of practical results.

"When I was five and twenty", said Nassau Senior, "I determined to reform the condition of the poor in England." Thornton who quotes this in the preface to his book on labor, adds:

"When I was myself about the same age, I conceived, not indeed the same ambitious design, but much the same desire as that which it implies. More than five-and-twenty years have passed since then, and it is somewhat sadly now, with sexagenarianism at no great distance, that I contrast the insignificance of performance with the magnificence of youthful projects. But the passion of a life is not to be extinguished by any failures that do not extinguish life itself, and so long as any strength is vouchsafed to me, so long shall it be cheerfully devoted

to continued search after a cure for human destitution."[4]

Doubtless some such thought as this may have animated at least a few of those who were present at the foundation of our Association. Perhaps if any of us were quite as ambitious we should not like to acknowledge it now that we are in middle age,—or, as one of our presidents says less flatteringly, "Now that we are old duffers."

Certainly a practical purpose was dominant among those who were in control at the time. There was a striving for righteousness, and perhaps here and there might have been one who felt a certain kinship with the old Hebrew prophets. Another element perhaps laid more emphasis upon correct thought, holding that so long as men think correctly we need not concern ourselves with their action. Certainly everyone was animated by the love of truth for its own sake. Undoubtedly a dominant note was then to do things practically and scientifically and bring to pass results.

This Statement of Principles then was a point of union to bring together those of like aims and to keep out others at least from leadership. As a matter of fact, our Statement did arouse enthusiasm and it did furnish a motive force which very soon gave us an influential position.

Rightly or wrongly to many, the Statement of Principles seemed like a proclamation of emancipation. At this time the enthusiasm with which we were greeted may appear a little difficult to comprehend. But a few quotations will help older men to recall their earlier impressions and the younger to understand the situation at the time. The following five quotations are from letters received by the first secretary before the Saratoga

[4] P. 1 of Preface to first edition of Thornton's "On Labor, Its wrongful claims and rightful dues, Its actual present and possible future."

meeting and were replies to a request to join the movement to organize the American Economic Association on the basis of the prospectus sent out giving "Objects" and "Platform."

Dr. Albert Shaw, then editor of the Minneapolis Tribune, wrote: "The time is ripe for the movement.... It seems to me the society will be a decided success from the start."

Professor Henry C. Adams of Michigan expressed himself as follows: "The more I think of the project you have set on foot, the more I am convinced that it is timely, and that the association may be made the centre of a marked influence upon economic thought."

Dr. Washington Gladden said: "I hope to coöperate in the organization of your society, in which I am deeply interested."

Professor J. B. Clark, then of Smith College, wrote: "The plan proposed is quite in line with my views and wishes. I shall be glad to be counted in in such an organization."

President White of Cornell: "I agree with you entirely that the *laissez-faire* theory is entirely inadequate to the needs of modern states. I agree, too, entirely with the idea that we must look not so much to speculation, as to an impartial study of actual conditions of economic life, etc. In fact I like your whole statement, and I hope to connect myself with your association after my return from Europe—probably next summer."

After our organization Dr. Elisha Mulford, author of "The National", a book which in its day exerted a marked influence, wrote as follows: "No recent invitation has given me more pleasure than yours to join the American Economic Association. I subscribe to its articles. It places us in the same plane with all the greater

universities and with the age. In the transitions of thought, none has been more significant than the humanization of political economy. Now, as Mr. Toynbee says: 'the long controversy between the economists and human beings has ended in the conversion of the economists.' "

Why this jubilation? Why this feeling of emancipation? It was felt by many that political economy was opposed to the recognition of any ethical element in our economic life, that it opposed all *social* reforms for social uplift as futile, that it exalted into a principle of economic righteousness the individual and unrestrained pursuit of self-interest, that it almost deified a monstrosity known as the economic man, that it looked upon *laissez-faire* as a law of beneficent providence, and held that free trade must be received as an ethical dogma, being a practical application of the command, "Thou shalt not steal", for here inconsistently an ethical principle was admitted as all-controlling. Now let it be said that no support, or at any rate very little support, for such views could be found in the writings of the great economists of England or any other country; but a false and undue emphasis of certain teachings of the masters had led to this misapprehension; and for this one-sided development, popularization and the exigencies of practical politics were largely responsible. Hence when the recognition of evils was proclaimed as in harmony with science, when it was proposed to examine the actual situation of the wage-earner and to reason on the basis of observation, when it made known that a body of economists were prepared to examine free trade and protection scientifically and not dogmatically, and that economics embraced the whole of the economic life; the simple message, which now no one would think it neces-

sary to proclaim, produced an impression and aroused an enthusiasm which can be understood only by those who by the aid of the scientific imagination work their way back to the situation of 1885.

Some of the younger men not present at the founding of our Association have regarded the controversy about inductive and deductive method as a barren and fruitless one. It is because they did not understand the situation at that time. There was opposition to historical, statistical study as an essential means of discovering economic truth, and emphasis was laid upon the so-called historical method because at that time it was necessary. Here and there it may be undue emphasis was laid upon this, because, as Adam Smith says, "when the twig is bent too much in one direction it is necessary to bend it in the other to make it straight." It is only those who fail to realize the situation at that time—so hard to understand at the present—who can regard as futile and meaningless the controversy regarding induction and deduction, statistical and historical method.

Professor W. W. Folwell, one of our most loyal members and supporters—one who, loved of all, has in his retirement the good wishes of our entire body—attempted in our early days to organize a branch of our Association in Minneapolis and found effective opposition in the antagonism of university men who had learned economics as it had been very recently taught in our schools. Professor Folwell wrote me as follows in explanation of his failure: "The opinion prevails far too widely that political economists must be mere doctrinaires and must contend for some set of opinions and some course of policy. Critical study of phenomena is as unpopular as free thinking in religion." It takes a quotation such as this to bring before us and make us realize a condition

seemingly as remote from us as the pyramids of Egypt, and yet a condition which as a matter of fact existed in some quarters less than twenty-five years ago.

One may also examine the files of contemporary periodicals to see the alarm the statistical and historical method aroused. This method may have been advocated with too much confidence and in too exclusive a spirit—perhaps in some cases with a provoking cocksureness and an irritating assumption of superiority. And doubtless this was responsible for a certain antagonism. It seemed to some radical in theory, and the conclusion was drawn that it must be radical in practice. Hence the alarm in some quarters. Now everyone, of course, knows that it leads to essentially conservative conclusions in practice.

At the same time, it is curious to notice the trend of events with respect to the use of the deductive and inductive method in economics. Professor Patten at the outset protested in correspondence against the emphasis upon the inductive method and historical study, although always one of the most enthusiastic supporters of the Association. In recent letters he expresses the view that when we returned from Germany "we overestimated the use history would be to us in our struggle. We had the right idea but our training started us in a wrong direction. We also had no idea of the richness of the American material that was at hand." He also takes up the works of the various leaders in the formation of the Association and calls attention to the fact that deduction and speculation are prominent elements in them, while history has been very little cultivated by our founders.

Time has also produced other changes. Some of the conservatives and radicals, it has been said, have moved in opposite directions and have approached each other—

perhaps even passed each other in their opposite movements. Perhaps now it would not be possible to say of any one of the great American universities that it stood in a distinctive sense either for progressive or conservative economic thought.

Let us consider briefly the circumstances under which the American Economic Association was organized. New life was stirring in the country. It was frequently said that we were living in a new economic world, and such in fact was the case. Great epoch-making events of an economic character were then recent. Twenty years earlier the Civil War had closed, and had brought with it most momentous economic problems which were far from solution, and some of which still vex us and doubtless will vex us for generations to come. The great crisis of 1873 was still more recent. The money question was still alive and, although specie payments had been resumed in 1879 and the greenback question was disappearing, the silver question was looming larger and larger. Great strikes were then recent, and the organization of capital and labor was proceeding apace.

The need of scientific treatment of economic questions was keenly felt at this time by our leaders of thought. Political economy as it had been taught in the American colleges and universities up to that time was, generally speaking, rather barren. Somtimes it was called the "dismal" science and sometimes "dry bones." Both of these imply exaggeration, but they show at the same time the position our subject occupied in the public mind. Generally speaking, the ordinary man looked upon political economy as chiefly occupied with a controversy between protection and free trade, and he assumed that every orthodox political economist must be a free trader. Otherwise the great message of political economy was

*laissez-faire, laissez passer,* get out of the way, don't interfere with business, let natural laws rule. The whole thing was reduced to comparatively few formulas and certainly did not arouse the enthusiasm of American youth.[5]

The young men who gathered at Saratoga in 1885 to form the American Economic Association had very generally returned from Germany about 1880. Ideals of freedom were strongly cherished and very precious to us all. So as not to commit others I will describe my own feelings as a student of economics in Germany, but I believe I speak for many others. I had the feeling when I went there that I had entered into a new heritage of freedom, and a certain joyous expansion was one of the most pronounced feelings which I experienced. There

[5] As indicative of the opinion of our chosen leader in these early days, the following quotation from the "Opening Address" of President Walker, delivered at our Third Annual Meeting, in Philadelphia, December 1888, is noteworthy:

"Yet, while *Laissez-Faire* was asserted, in great breadth, in England, the writers for the reviews exaggerating the utterances of the professors in the universities, that doctrine was carefully qualified by some economists, and was by none held with such strictness as was given to it in the United States. Here it was not made the test of economic orthodoxy, merely. It was used to decide whether a man were an economist at all. I don't think that I exaggerate when I say that, among those who deemed themselves the guardians of the true faith, it was considered far better that a man should know nothing about economic literature, and have no interest whatever in the subject, than that, with any amount of learning and any degree of honest purpose, he should have adopted views varying from the standard that was set up.

"Such intolerance was not necessarily due to bigotry. It was, the rather, involved in the very nature of the *Laissez-Faire* doctrine. If that was true, there was no reason why an economist should have any professional communion or intercourse with an outsider. No good could come of it but only a possible weakening of faith on the part of disciples and a certain encouragement to heresy." *Pub. of the Amer. Econ. Ass'n.* Vol. IV, pp. 254-5.

was a free and large spirit on the part of professors of economics in the Fatherland, as well as other professors in the German University, to which I had not been accustomed. I felt that in the atmosphere of the German universities there was room for growth and encouragement of the development of individuality, which was something new to me.

We were generally impressed with the sterility and barrenness of the old economics as taught us in our college days. We became weary of the controversies, the wordy conflicts over free trade and protection, and the endless harangues over paper money which seemed to us to savor more of political partisanship than of scientific inquiry; and we had little patience with a press that knew of no other public issues. We found, or thought we found, in control conceptions of orthodoxy, and we were generally prepared to fight any such conceptions as not belonging to the realm of science. When I said that we were prepared to fight these conceptions, I recognize the pugnacious element; and it might as well be acknowledged that this element was present. How generally our members were belligerent I cannot attempt to say. Certainly more than one felt prepared to fight. We were young and had the pugnacity of youth. We felt called upon to fight those who, rightly or wrongly, we believed, stood in the way of intellectual expansion and of social growth. But something more than this may surely be said. Some of us felt that men who thought as we did were denied the right to exist scientifically, and this denial we believed to proceed from certain older men able to exercise a very large influence over thought, particularly thought in university circles. Very soon we felt that we had won our battle so far as the right to exist scientifically was concerned, and our pug-

nacious temper rapidly fell, certainly to below the boiling point.

My own experience is perhaps typical. I had been taught political economy in this same Columbia University which now occupies so high and distinguished a position in this branch of knowledge among all the universities of the world. Our teacher was an excellent man upon whom I look back with affection and admiration, and from whom in some other subjects I learned a great deal. In addition to political economy, however, he taught English literature and philosophy. He was especially strong in the Scotch common sense philosophy as taught by his own master, Sir William Hamilton, had a considerable knowledge of English literature, and excellent taste. In political economy, however, he assigned us Mrs. Fawcett's "Political Economy for Beginners." Each week we had one chapter and were asked in the recitation the questions at the close of the chapter. As I look back upon it, I feel that more harm than good was accomplished. We really gained no useful knowledge, and perhaps were left with an insufficient appreciation of our own ignorance.

Graduating from Columbia in 1876, the following year I went to Germany to carry on my studies. About this time or a little later, Professor Farnam, Professor E. J. James, Professor Simon N. Patten, Professor E. R. A. Seligman, Professor J. B. Clark, and many others went to Germany also. There we found that political economy was a large and inspiring subject, and we came back with a two-fold message—a scientific message and a practical message.

The *Verein für Sozialpolitik* organized in 1873 (but preceded by the celebrated *Eisenacher Versammlung* of 1872) had an appreciable influence on the minds of many

of those most active in the formation of our Association, and some of us unquestionably felt towards certain older economists and publicists of the country much as Professor Schmoller said that he and his associates felt toward the so-called "Manchester" men of his day, who had organized the *Volkswirthschaftlicher Kongress*. In his opening address at Eisenach, October 6, 1872, Professor Schmoller said of those who controlled the *Volkswirthschaftlicher Kongress* that they were opposed to all plans of reform "which did not harmonize with their one-sided doctrinaire principles; they did not admit the existence of a labor question; to speak of such implied either a confusion of thought or demagogic incitement to discontent; wage-earners had all that they needed; the one who did not advance was personally to blame." But he said a school with other views had arisen, and, instead of trying to pour new wine into old bottles, the right thing was to proceed independently and to form a practical unified organization for those who shared these new views in order to produce the desired effect on public opinion and legislation. Now the *Verein für Sozialpolitik* had as its aim practical reform in factory legislation, taxation, private corporations, industrial insurance, etc. But our aim was two-fold,—scientific and practical,—and the former quite as much as the latter. The immediately practical side of our proposed activities was seen in the provision in our by-laws for the appointment of standing committees on the model of the *Verein für Sozialpolitik,* and the following were specially mentioned:

1. On Labor.
2. On Transportation.
3. On Trade.
4. On Public Finance.

5. On Local Government.
6. On Exchange.
7. On General Questions of Economic Theory.
8. On Statistics.

And in the Resolutions the following topics were suggested to the Chairman of the Standing Committees, as subjects for reports:

1. Effect of Half-time Working on the Laborer.
2. The Normal Working Day.
3. Employment of Women in Factories.
4. Municipal Finance.
5. The Income of Public Works in Cities.
6. Rent in the United States.
7. National Railroad Commission.
8. Limitation of Suffrage as a Remedy for Abuses in Local Administration.
9. Effect of Transportation on the Laborer.
10. The Silver Question.

It was the opinion of some of our founders that detailed reports and recommendations would be made by the committees, and that these would be debated and have direct influence on public opinion and legislation.

The first committee to make a report was the one on Public Finance, of which Professor H. C. Adams was Chairman. This report was published as No. 6 of Vol. II, *Publications,* Series 1; and was entitled "Relation of Modern Municipalities to Quasi-Public Works." Other members of the committee were George W. Knight, Davis R. Dewey, and Arthur Yager; afterwards Charles Moore and Frank J. Goodnow. This committee sent out a "Questionaire" in December, 1885. The idea, however, was that each member of the Association should belong to a committee and that the work of the Association would be essentially a work of committees; but

this idea was soon abandoned. One or two committees appointed did little work. In later years we find in the Council minutes references to Special Committees, which, however, seem also to have been designated as Standing Committees. Some of these made noteworthy reports. At the Cleveland meeting, December, 1895, a Special Committee was appointed to consider "The Scope and Method of the Twelfth Census." This consisted of Richmond Mayo-Smith, Chairman, Walter F. Willcox, Carroll D. Wright, Roland P. Falkner, and Davis R. Dewey. This committee gathered together a number of essays which were submitted with their report and later constituted a volume of over 600 pages, entitled "The Scope and Method of the Twelfth Census. Critical discussion by over twenty statistical experts." This volume is well known, and it is safe to say has exercised a very great and beneficent influence.

At the Eleventh Annual Meeting in 1889, a Committee on Colonies was appointed with Professor J. W. Jenks as chairman. This committee presented a report in 1900 together with essays which were collected and edited by the committee. It appeared as No. 3 of Vol. I, Third Series, August, 1900, under the title, "Essays in Colonial Finance, by members of the Association." The report was signed by Jeremiah W. Jenks, Chairman, Charles S. Hamlin, Edw. R. A. Seligman, and Albert Shaw. This committee had already made a preliminary report at the Ithaca meeting in 1898.

At the meeting held in Baltimore, December, 1905, we find in the minutes of the Council that there were then three Standing Committees for the study of special topics, *i. e.*, the Committee on Municipal Accounting and Finance, which had been appointed in 1900, with Frederick A. Cleveland as Chairman; the Committee on Index

Numbers, with Professor C. C. Plehn as Chairman; and the Committee on the Economic Position of the Negro, with Professor W. F. Willcox as Chairman. The Committee on the Negro, authorized by the Twelfth Annual Meeting, 1900, secured the presentation of several papers of great interest at the Fourteenth Annual Meeting in 1902.

The theory of special committees is stated in these words by Professor Charles H. Hull, in his report as Secretary to the Council at the Thirteenth Annual Meeting, December, 1900. "The theory of these Special Committees, as the secretary understands it, is that the Association makes no attempt to impose the work of a committeeman upon any member, but, wherever a sufficient and well-balanced group of members desires to take up some subject of investigation which promises results, the Council is inclined to give them its blessing, and the Publication Committee is likely to look with favor upon the proposal to print their report." It will be seen that this is a considerable departure from the original theory of the Standing Committees.

Another line of activity was the effort to encourage popular interest in economic questions by offers of prizes for essays on various economic questions of the day; these prizes performing an extremely useful purpose in their day, in awakening an intelligent appreciation of economics, in helping start at least a few young people in useful careers, and in attracting support to our Association at a time when the struggle for existence was keenly felt by those who had assumed the burden of our affairs.[6]

[6] Among these prize essays special mention may be made of one. Amalie Rives, as she then was (now Princess Troubetskoy), had written some beautiful sonnets on children published in Harper's Monthly Magazine for May, 1889, under the title "Unto the Least

But the more purely scientific aspects of our activity soon gained the ascendency. For this there were several reasons. We were generally too busy with other duties to develop the work of the Standing Committees. Our president had also and first of all his exacting duties as President of the Massachusetts Institute of Technology. Another officer of the Association was soon much occupied with his work as a member first of a municipal and later of a state tax commission. And these are typical cases. In our new country, we are engaged in "building up" processes and in making scientific work easier for those who follow us. We are building up departments and schools in our universities and institutions in our cities. And if institutions are the lengthened

of These Little Ones." These were equal, it seemed to me, to the child labor verses of Mrs. Browning. She had given the money received for them to our Association for a prize for the best essay on Child Labor. This prize was equally divided between Dr. W. F. Willoughby, now Assistant Director of the Census, and Miss Claire de Graffenried, for many years employed by the United States Bureau of Labor. These two prize essays appeared in The Publications of the American Economic Association, First Series, V, 1890. The amount of the prizes was $100. Another prize essay was published in Vol. VIII, 1893, of the same series, and entitled, The Housing of the Poor in American Cities. The prize recipient was Dr. Marcus T. Reynolds, and the prize was $300. In 1888 a prize was also given for the best essay on the evils of unrestricted immigration. In 1891 two prizes were awarded which had been offered in 1889: namely, a first prize of $300 and a second prize of $200 for the best and second best essays on women wage earners. The first prize was won by Miss Clare de Graffenried, and the second by Mrs. Helen Campbell. In 1889 still another prize of $250 was offered by the late Thomas G. Shearman of Brooklyn, N. Y., for the best essay on state and local taxation of personal property in the United States. Another prize offered was one of $500 for the best essay on the improvement of country roads and city streets. Prizes like these, while performing a useful service in their day, were soon discontinued, as it did not seem longer that this was exactly the best way for our Association to cultivate an interest in economics.

shadows, each of some one man, we may have satisfaction in contemplating our shadows. Otherwise we are at a marked disadvantage in comparison with men in a country like Germany, already so highly developed; or a country like England where there is a so much larger class of cultured men of independent resources. But another reason for our departure from following the more immediately practical course of activity is found in the development of other organizations devoted to special lines of economic reform, to all of which members of our Association belong. We thus think of the National Consumer's League, the Child Labor Committee, and the American Association for Labor Legislation; the latter certainly a child of ours.

Our Statement of Principles furnished motive power. It was held to for a very short time, always, it must be confessed, with opposition; and then after three years, when it was felt that it had accomplished its purpose, it was abolished by unanimous vote and absolutely without opposition. Our Association professed something which at the time was felt to be of significance, and it was greeted with enthusiasm because it was not colorless.

It has been said by some that the founders of the American Economic Association had absorbed German ideas and attempted to transplant them into American soil, and that this was an alien soil. This is undoubtedly erroneous, for our Association was essentially American in its origin and ideas. German influences have been felt and we are all thankful for German science, but, as Professor Farnam has clearly shown in his paper on the "Relations of German to American Economics"[7] on the occasion of the celebration of the seventieth birthday of

[7] Farnam, Henry W.: *Deutsch-amerikanische Beziehungen in der Volkswirtschaftslehre.*

Professor Gustav von Schmoller, these ideas of the founders ascribed to German influence are not un-American, particular reference being made to the opposition to *laissez-faire* and the expressions in favor of an active policy of government. Professor Farnam is quite right in his views that *laissez-faire* is not a peculiar American product. It is rather an exotic, and it is worthy of special note that we must look to the prairies of Illinois, swept by the free air of the Mississippi Valley, for the authorship of the constitution of the proposed Society for the Study of the National Economy, in which still more emphatically than in our own Statement of Principles we find proclaimed opposition to non-interference in economic affairs and the advocacy of very large and broad functions of government. What Germany did for us was, in the sense in which Socrates used the term, to serve as midwife, helping to birth the ideas which had been conceived under American conditions. We were impressed in the German universities by a certain largeness and freedom of thought, which was novel but very refreshing and delightful. Speaking for myself—and I believe for most of us—I may say that the idea of relativity as opposed to absolutism and the insistence upon exact and positive knowledge produced a profound influence upon my thought. I must not fail to mention the impression produced upon my thought (and again I believe I may speak for most of my associates) by the ethical view of economics taught by Conrad, by Wagner, and above all by Knies, under whom I took my degree. These economists had a sufficiently clear perception of the difference between ethics and economics. They had a feeling, however, that ethical influences should be brought to bear on our economic life, and they believed also that those ethical influences which were actually at work shaping

economic life to a greater or less extent should be examined carefully as existing forces. And, finally, it is doubtless safe to say that the warm humanitarianism of the German theorists moved the Americans of my day deeply. But we remained Americans whose intellectual life had been quickened by our own life in the atmosphere of the German universities.

The American Economic Association took a stand at its organization for entire freedom of discussion. We were thoroughly devoted to the ideal of the German university—*Lehrfreiheit* and *Lernfreiheit;* and we have not hesitated to enter the lists vigorously in favor of freedom when we have considered it endangered. Here there has been no apparent difference. Whatever opinions otherwise may have separated our members, we have stood shoulder to shoulder as one man for free discussion. But was this ever necessary? Rightly or wrongly, we did feel at first that it required a struggle to find a place in our academic life for free expression of our views. As to the condition of affairs which at least some of us believed to exist, it may not be inappropriate to quote from a letter which President Walker wrote under date of April 30, 1884.

"Perhaps no one has had more occasion than myself to feel the need of such moral support from felow workers in political economy as might come from formal association and concerted action. When I first started out in 1874, I suffered an amount of supercilious patronage and toplofty criticism which was almost more than I could bear. Downright abuse would have been a luxury . . . . .

"I have hit the Economic Harmonies pretty hard, I fancy, from the squirming; but all this is only destructive, and should but clear the way for serious, careful, productive work in economics."

To ascertain better the feelings of our founders and to avoid attributing my own views to them, I have asked three of our members to answer the question: "What did the founding of the American Economic Association mean to me?" and I give the three replies from these three men who represent different shades of opinion. The first quotation is as follows:

"It is not easy for me to reply to your letter. I, no doubt like all the other of the younger men, was interested in giving voice to the need of scientific treatment of the economic problems of the day, and, above all, we wanted to protest against the one-sided views which were current at that time. So little attention was paid to the professional economist that I think we all felt it desirable to enhance the idgnity of the science. The founding of the Association meant a great deal to me. It brought me in touch with all men who were working on the subject, and the personal association was of the utmost possible value as a stimulus. I think we all did better work because of the Association."

The second correspondent writes:

"The establishment of the American Economic Association meant to me two or three things. In the first place, the opportunity of getting acquainted with men who had work in the same field throughout the country, which I regard as of very great value. Secondly, a chance by conference with them to see how far my own ideas were correct, or if I saw no reason to change them, how far I could hope for coöperation among my colleagues in helping to realize them.

"Like all other men, I found cause, through this intellectual attrition, to alter many of my views more or less, and on the other hand, by intercourse with these men, learned how to secure their support for my own ideas as far as we could agree upon them.

"I am quite convinced, moreover, that this coming together of the men at work in this field and threshing

out the questions on which there was difference of opinion, helped to develop an *esprit de corps* in the body as a whole which was a very real advantage to all of us and contributed some little to making our influence in the country as a whole more effective.

"The publications of the society, moreover, offered an opportunity to bring out things which at that time either could not have been published at all except at the expense of the writer, or would have received no attention, or at any rate not as much as they received in coming out as the publications of an organization like this.

"This organization served, moreover, to emphasize and put in a clear way before the public men the fact that modern economics was after all a new study. It was not simply a science which offered old solutions to new problems, but it had in it the promise and potency of life.

"These are things that occur to me upon a very brief reflection."

My third letter reads as follows:

"The attitude of those of us who went to Germany to study thirty years ago differed from the aims of the same men who later formed the American Economic Association, in that the former was negative while the latter was positive. I had little notion of what I was to get in Germany when I went, but I had very definite notions when I returned. I was tired of American politics and traditional religion, and even more disliked classical studies. It was craving for a broader view that lured me to Germany, and while there I learned to base my thought on the world's experience instead of conventional English ideas. The study of history did even more for me than that of economics. I came back in open revolt against the traditional concepts of our race and found the narrow self-satisfied attitude of the American very trying. The American Economic Association was a protest not only against the narrow English economists but also against the current political and social ideas. It has narrowed its functions since the Political Science Association and the Socologists have split off from it. We

combined in ourselves all three of those functions, and the influence of the Association in its early days was as much in politics and sociology as in economics.

"The fruit of our efforts is not only the changes in the field of economics, great as it is, but also the social and political changes that were bound up with them. It is hard to reproduce this general attitude because we have all become specialists, but this broader viewpoint represents the attitude of those who strove to form the new Association."

The men who founded the American Economic Association look upon its foundation as the great event in American economics; but they recognize that they were but the medium through which deep currents of life found expression. Before the American Economic Association came into existence, there were comparatively few, indeed very few, professional economists in the United States; and, while there were a few noteworthy economic treatises and many able economic papers prepared by statesmen, we may regard the history of economic thought before this event as leading up to it, and the events of importance since its foundation may be regarded in the main as flowing from it. Eighteen hundred and eighty-five may be designated as our hegira. The American Economic Association is not to be looked upon as the sole creator of the thought-*forces* within our field, but it is one of the thought-*causes*. It is beyond question that had the Economic Association not come into existence we should have had a development of economic thought in this country; but it is certainly true that our Association has gathered together the thought-forces and has given expression to them. It has served as a stimulus to young and old. It has rewarded youth by recognition. It has been remarked by careful observers that the young men in economics who have been advanc-

ed during the past twenty years and more have very generally been those frequently seen at the meetings of the American Economic Association. Of those now prominent in economics in our country one after another has won his spurs at our annual meetings. I well recall one clearly marked typical case when one of the economists of the country presented a paper at one of our early meetings. Up to that time he had been little known and his place had not been assigned. After he read his paper he clearly took a position as one of the recognized American economists and has held it ever since. Our Association has thus been an arbiter of destinies.

Our Association has stimulated improvement in economic and statistical work. All who have followed our history will recall our critical treatment of the census office and the active part that we took in favoring the establishment of a permanent census bureau. We may fairly claim an appreciable influence in the improvement which is going on in the census work of the country. The work of railway reform is associated with our history. Railway problems have been discussed faithfully by men representing different points of view, and members of our Association are now engaged in bringing about improvements of value both to the railways and the general public. Our Association has been one of the forces in favor of sound money, helping the country to weather storms and to avert threatened evils. The trust problem has received fruitful discussion in our meetings, and our members have been among those who have thrown light on the scientific and practical aspects of industrial combinations. The good roads movement received an impetus in an able monograph contributed by one of our presidents. Social reform has been guided and stimulated by our efforts.

Our direct influence has been very largely exercised through our meetings and through our publications. It is difficult at this time to characterize the economic literature for which the American Economic Association has assumed responsibility, to the extent of publishing and mostly having directly evoked it. In speaking about our literature, we of the Association are really speaking about ourselves. And we lack the objectivity which will be easier for those writing let us say twenty-five years from now. One or two attempts have already been made to characterize recent economic literature. I am responsible for one, and Professor Fetter, long secretary of the Association, for a different one. One sketch took up our prominent writers and said something about their work, and the other attempted to trace recent developments of theory, speaking about the utility and value discussions, the controversies in regard to land and capital, and about the significance of changing industrial development which should be accompanied by corresponding development of concepts. All these discussions have been advanced by our Association.

One or two things of a general nature may be said and occur readily to me in looking through the titles of the monographs appearing in our first three or four volumes. We see at once, when we examine these titles, that the tendencies of economic thought have here early revealed themselves. Monographs precede books as articles precede monographs, giving us a development which may be characterized as "first the blade, then the ear, after that the full corn in the ear." The monographic stage is found in our publications first, and reveals tendencies. In Volume I we find the monograph by Dr. E. J. James on the relation of the modern municipality to the gas supply, followed in the second volume

by his monograph on the railway question. Here we find revealed lines of thought in regard to our public utilities which have been steadily developed, and which were in the main correctly traced out. In this same Volume I, we find two monographs on coöperation: namely, "Coöperation in a Western City", by Albert Shaw; and "Coöperation in New England", by Edward W. Bemis. In Volume II we find another monograph on coöperation, namely, "Three Phases of Coöperation in the West" by Amos G. Warner, and in this volume is also "Historical Sketch of the Finances of Pennsylvania", by T. K. Worthington. These monographs on coöperation and the one on the finances of Pennsylvania were written by students of mine in the Johns Hopkins University, and suggest a German influence, namely, the insistence on observation. I believe that all the founders of the American Economic Association, whether their writings were deductive or inductive, have taught their students in the phrase of Richard Jones, to "look and see." We have a rich development of descriptive monographs represented by this early work. In Volume II, we find a monograph on the early history of the English woolen industry, by W. J. Ashley, and one on the mediaeval guilds of England by Professor Seligman, thus starting a line of historical work.

In Volume III we have a very noteworthy monograph by Professor John B. Clark, entitled "Capital and its Earnings", in which we find the germs of his work since that time. This is a monograph which no one should neglect who wishes to follow the development of Professor Clark's theories.

As secretary of the Association for the first seven years of its existence, I was in a position to follow probably better than any one else the actual influence exerted

by our Association; and it is no exaggeration to say that it was a very great one, and very appreciable in the development of social control in our country. Our publications have gone to those persons in a position to exercise influence, and they have gone at the right juncture and produced an impression that is out of all proportion to the number of our members.

In our early days branches of the American Economic Association were formed in various parts of the country and served a most useful purpose in their time as leaders in the intelligent discussion of questions of theory and in the treatment of local economic problems. Each one was a centre of light and leadership. The following places among others had branches: Springfield, Mass.; Orange, New Jersey; Washington, D. C.; Buffalo, New York; Canton, Ohio; Galesburg and Geneseo, Illinois; Kansas City, Kansas. One of the most thriving of these branches was the Connecticut Valley Economic Association, with headquarters at Springfield, organized in January, 1886, probably the first one to organize; and three well known American Economists contributed to its success, namely, Professors J. B. Clark, F. H. Giddings, and Dr. E. W. Bemis.

Our Association has exercised an influence on foreign countries. In Glasgow it served as a stimulus for a local University Economic Association.[8] From Oxford, England, came the suggestion made by a well known English economist of the formation of a local association

[8] In this connection the following quotation from a letter of Professor James Mavor, University of Glasgow, is interesting: "I duly received your kind favor enclosing Book of Constitution of The American Economic Association and have to apologize for failing to acknowledge your kindness forthwith. The book has been found of considerable use in suggesting a constitution for two associations quite recently established in Glasgow. One, 'The Uni-

in alliance with the American Economic Association, but finally the British Association was formed and our correspondence shows that our own Association served both as a stimulus and a model.[9] The correspondence of the

versity Economic Association', promises to be a thriving institution, many of the best students, holders of fellowships, honor men, and assistant professors have joined it and are regular attendants at its fortnightly meetings. Economics have been so woefully neglected in this country that even this small mercy is to be thankfully received. Then the movement for the extension of University teaching among working people by evening lectures, etc., has resulted in the formation of an association at whose monthly meetings are read papers by University men and others for the most part on economic subjects.

"I should be exceedingly glad if an association on the lines of yours could be organized for Great Britain. This will soon be possible. The need for it is very manifest."

Under date of Oxford, England, January 20, 1887, a well-known English economist wrote that a "little working society of men interested in economics" had been created, and continued as follows: "And it has occurred to some of us who are acquainted with the existence of the American Economic Association, and who know such work as that appearing in the Political Science Quarterly and in the Science Economic Discussion, that it would be well if in some way we could join forces with the American Association. We feel that the American Association is doing most excellent work, for it is giving the results of German thought as seen by men who understand the English orthodox teaching and English and American circumstances . . . Perhaps you would do me the kindness to send the programme of the American Economic Association and any other information you may think useful; and at the same time say whether it would be possible to arrange some sort of affiliation or alliance." Finally, however, the British Economic Association was formed, and such an alliance did not seem feasible.

[9] The British Economic Association was founded November 20, 1890. On October 24th of that year Professor Alfred Marshall sent out from Cambridge a call for a meeting and in the circular of invitation he said:

"There are some who think that the general lines to be followed should be those of an English 'learned' society, while others would prefer those of the American Economic Association, which holds meetings only at rare intervals, and the membership of which does

secretary's office shows our influence as a stimulus in the life of similar associations in Australia and Japan.

One feature of our internal history was the Council, which kept in its hands the control of the Association, electing officers and conducting its affairs; only changes in the constitution being referred to the general body. Occasionally this was criticised as undemocratic and on its account one member resigned, but it seemed to be necessary at the first to prevent our organization from being captured by some economic sect or group of reformers. Our aim was always to elect to the Council all economists who attended our meetings and showed a serious interest in our work, also business and professional men in considerable numbers. The need of such precaution having passed, this arrangement has been dropped.[10]

Another interesting event in our internal history is the

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not profess to confer any sort of diploma." *Pub. of the Amer. Econ. Assn.* Vol. VI, 166.

Dr. Albert Shaw, who gave an account of the formation of the British Economic Association in a communication to the American Economic Association, adds the following to the foregoing quotation from Professor Marshall:

"The meeting was as successful as its promoters could have wished. It was well attended, it was generous and tolerant in the tone of its discussions, and it brought together men of many different shades of opinion. To Americans it may justly be some ground of satisfaction that the new British Association agreed unanimously to organize itself upon the model of its American contemporary." *Pub. of the Amer. Econ. Assn.* Vol. VI, p. 166.

[10] At a meeting of the Council in Chicago December 29, 1904, Dr. H. B. Gardner reported from the Executive Committee and Council that the Committee should take under advisement the amendment of the constitution in a manner involving the abolition of the Council. At the Baltimore meeting, December 28, 1905, such amendment was reported and adopted first by the Council and then by the general meeting of the Association on the same day. The Council then ceased to exist.

At first the minutes of the Council meetings were sent only to

position taken towards endowments. The Council at our Detroit meeting rejected the virtual offer of an endowment, it being feared by some that an endowment might come from sources that would prove embarrassing and would hamper our free development. The feeling was even expressed that we should from year to year be dependent upon our friends. It is possibly of some significance that the movement for an endowment came first of all from one connected with a state university and that the opposition sprang almost altogether from men associated with privately endowed universities. May I venture to suggest the question, Have we not now reached a period in our life when we could make use of the funds which an endowment would furnish and do so without danger, conscious or unconscious, to our scientific integrity?

It would not be right to close this paper without particular mention of our first president, Francis A. Walker, whom we delight to honor as one of our departed heroes. The men who established the Association felt at once and so surely that he was the natural president that no other name was even considered. He had occupied prominent positions in the country, and we looked upon him as a leader, who, as Bagehot said, had broken the crust and, far more than any other man, prepared the way for the development of future thought in economics in the United States. He was not selected because we necessarily agreed with his views, but because we looked upon him as a champion and emancipator.[11]

the Council members, but afterwards they were printed with the Proceedings of the Association.

The Council had its purpose in the early days of the Association. Like some other features, it was abandoned when it had served its purpose.

[11] When I notified President Walker that he had been selected as President of our new Association, he wrote me a letter in which he

In 1892 the personnel of the Association was changed so far as the president and secretary were concerned, and the Statement of Principles was dropped. It had always been felt that the presidency should be an honor office and that our president should be changed frequently in order to enable us to give recognition to those who deserved recognition. Very reluctantly President Walker had retained the presidency for seven years because it was felt that in early days he could be of service in this office. In 1892 it was felt that the time for change had come. Moreover, it was felt that we should give recognition to

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gave expression to very warm feelings of gratitude on account of this recognition, and made it clear that his election had given him new hope and encouragement.

He told at still greater length what this signified for him at a dinner given to the Council members by Professor Seligman in New York in 1886. At my request Professor Seligman has very kindly written out his interesting recollections as follows:

"As to the remarks of President Walker at the dinner at my house, my recollection is pretty good. He stated that the formation of the Association was in his opinion an epoch-making event, and that before long the influence of the newer ideas in moulding American thought and statesmanship would be apparent. He desired, however, at that time especially to state how much the Association meant to him personally. He described to us in eloquent terms the sense of isolation that he had felt, the difficulties with which he had to cope, and the sense of depression that often overcame him in making, single-handed, the fight for what he called 'the independence of economic thought.' He referred to the scarcely veiled contempt on the part of the makers of public opinion of those days as especially galling; and he pointed out that their intolerance was comparable to that of the mediaeval church. He felt that the combined influence of all these men was calculated to prevent any generous or independent thought on the part of younger men, and he welcomed the formation of the Association as making possible a combined protest against the older ideals, and putting an end once and for all to this policy of contemptuous silence or of scarcely less contemptuous allusion. He went on to speak very modestly about his own attainments and preparation. He said that many of the younger men then sitting round the table enjoyed the advantages which he had been denied; that in especial they were

Professor Dunbar of Harvard, whom we all admired and liked personally. He was then not in robust health and the feeling was expressed that we ought not to delay in giving him the recognition which we felt was his due. There was not the slightest opposition, so far as I can recall, to his election, certainly no opposition whatever from those who were regarded as the more progressive members of the Association. I had been secretary for seven years, had done a great deal of hard work, and felt that someone else should then take the burden, and ventured to nominate Professor E. A. Ross, one of my former students, who seemed advantageously situated to care for the work of the secretaryship.

As already explained, our Statement of Principles was dropped without opposition and by unanimous vote after three years, because it was felt that it had accomplished its purpose. We differed among ourselves: in some

thoroughly acquainted with the most recent advances of scholarship on the European continent, whereas he had to work out his way laboriously on the foundation of English economics. He predicted hence, that there would be a great renaissance of economic study in the United States, and he was proud to have been selected as the standerd-bearer in this movement.

"This modesty on the part of Walker displayed itself on many occasions. I remember particularly the letter he sent me after the reading of my papers on 'Progressive Taxation' and on 'The Shifting and Incidence of Taxation', which were afterwards published by the Association. He stated that one of his fondly cherished hopes had always been to write a treatise on taxation from a point of view quite different from that to be found in English works. 'But,' he added, 'you are so very much better prepared for the task than I am, that I am only too glad to relinquish my plan in your favor.' I tried to urge him to reconsider his decision, and, as you may remember, I got him to write that very remarkable article on the Faculty Tax which appeared in the *Political Science Quarterly* in the early '90's; but on the main proposition he remained inflexible, and, on the contrary, encouraged me to go on. The same modesty and readiness to help others was, in my opinion, one of the chief characteristics of President Walker."

quarters, for example, a strong advocacy of deduction was found. One correspondent writes as follows: "In apparent opposition to this statement of diversity of belief, but yet in perfect harmony with it, is the fact that we all wanted a program of some sort so as to express more sharply our differences from the dominant school that we were opposed to and meant to fight to the last ditch. We knew we had a struggle before us, and we wanted no doubt as to our unity and who our enemies were. All this is perfectly true, and yet only a few years later when the victory was won, we no longer wanted a partisan attitude but one of scientific impartiality."

In recent years the history of the American Economic Association is largely the history of economic thought in the United States; and may this ever continue to be the case. Doubtless some of us who founded the Association in 1885 do not know nearly so much at fifty and fifty-five as we did at twenty-five and thirty. But young men have come forward and are still coming forward to instruct us. Let the young be tolerant—let them try to respect the fathers—"the old duffers"—remembering that even the youngest make mistakes and have still something to learn. Let the older men try to keep their eyes ever turned to the rising sun—the sun of science is ever dawning—and keep in close touch with those who come with morning faces bringing messages of hope and inspiration. We are catholic enough now for all honest scientific work and every different scientific method and viewpoint. We of fifty and fifty-five have learned to respect the work of the still older generation and none rejoice more heartily than we in the strength of the venerable fathers and in the honor that comes to them. May our scientific life be rich and diverse; may new points of difference arise to stimulate thought; but may we be

united in favor of the good, and ever cherish the broadest catholicity.

STATISTICS OF ANNUAL MEETINGS.

| | *Date of Annual Meeting* | *Place* | *No. Members* | *Main Subjects Discussed* |
|---|---|---|---|---|
| 1 | Sept. 8-9, 1885 | Saratoga, N. Y. | | Organization. |
| 2 | May 21-25, 1887 | Boston & Cambridge | 300 | The Railway Question. |
| 3 | Dec. 27-29, 1888 | Philadelphia, Pa. | 500 | The Wages Question ; Road Legislation; Economic Theory ; Statistics. |
| 4 | Dec. 26-30, 1890 | Washington, D. C. | 635 | Forestry ; Railroad Rates; Social Economic Problems. |
| 5 | Aug. 24-26, 1892 | Chautauqua, N. Y. | 732 | Taxation and Public Ownership; The Farmers' Movement ; Statistical Investigations. |
| 6 | Sept. 12, 1893 | Chicago, Ill. | 781 | Money ; Distribution. |
| 7 | Dec. 27-29, 1894 | New York | 661 | Labor Problems ; Economic Theory. |
| 8 | Dec. 27-31, 1895 | Indianapolis, Ind. | 652 | Theory of Economic Progress ; Currency Problems. |
| 9 | Dec. 28-31, 1896 | Baltimore, Md. | 665 | Economics and Jurisprudence ; Agricultural Questions ; Census Matters. |
| 10 | Dec. 29-31, 1897 | Cleveland, Ohio | 668 | Labor Bureau Investigations ; Taxation ; Reform of the Currency. |
| 11 | Dec. 27-29, 1898 | New Haven, Conn. | 685 | American Economic History; Banking and Currency ; Wages and Interest ; Labor Problems. |
| 12 | Dec. 27-29, 1899 | Ithaca, N. Y. | 745 | Trusts ; Railroad Problems ; Speculation ; Public Finance ; Consumers' League ; Twelfth Census. |
| 13 | Dec. 27-29, 1900 | Detroit and Ann Arbor, Mich. | 802 | Commercial Education ; Economic Theory ; Taxation of Quasi-public Corporations ; Competition ; Municipal Accounts. |
| 14 | Dec. 27-29, 1901 | Washington, D. C. | 950 | International Trade ; Industrial Policy ; Public Finance ; Negro Problem ; Arbitration of Labor Disputes ; Economic History. |
| 15 | Dec. 26-29, 1902 | Philadelphia, Pa. | 1011 | Trade Unions ; Railway Regulations ; Theory of Wages ; Theory of Rent ; Oriental Currency Problem; Economics and Social Progress. |
| 16 | Dec. 29-31, 1903 | New Orleans, La. | 994 | Southern Agricultural and Industrial Problems ; Social Aspects of Economic Law ; Relations between Rent and Interest ; Management of the Surplus Reserve ; State Taxation of Interstate Commerce ; Trusts ; Theory of Social Causation. |

STATISTICS OF ANNUAL MEETINGS.

| | *Date of Annual Meeting* | *Place* | *No. Members* | *Main Subjects Discussed* |
|---|---|---|---|---|
| 17 | Dec. 28–30, 1904 | Chicago, Ill. | 1027 | Theory of Money; Open or Closed Shop; Regulation of Railway Rates; Taxation of Railways; Preferential Tariffs and Reciprocity; Economic History of the United States. |
| 18 | Dec. 27–29, 1905 | Baltimore, Md. | 1032 | Theory of Distribution; Government Regulation of Railway Rates; Municipal Ownership; Labor Disputes; The Economic Future of the Negro. |
| 19 | Dec. 26–28, 1906 | Providence, R. I. | 1040 | Wages as Determined by Arbitration; Western Civilization and Birth Rate; Economic History; Government Regulation of Insurance; Trusts and Tariff; Child Labor. |
| 20 | Dec. 28–31, 1907 | Madison, Wis. | 1002 | Economic Theory; Labor Legislation; Relation of the Federal Treasury to the Money Market; Public Service Commissions. |
| 21 | Dec. 28–30, 1908 | Atlantic City, N. J. | 1030 | Making of Economic Literature; Collective Bargaining; Accounting; Labor Legislation; Employers' Liability; Canadian Industrial Disputes Act; Modern Industry and the Family Life; Agricultural Economics; Transportation; Tariff Revision; Money and Banking. |
| 22 | Dec. 27–30, 1909 | New York, N. Y. | 1360 | The Theory of Wages; Problems of Country Life; Valuation of Public Ser vice Corporations; Trusts; Taxation. |

President Dewey: Members, we have heard this historical account which has to do with the past. Some of it may seem like a dream to the younger members; part of it seems very far away to those of us who passed through it. Our Association has gone far, although it treasures in its memories the various stages we have passed through. The remaining addresses of the evening have to do with the work of the Association, with an eye toward the future rather than to the past.

If there is any one part in the educational machinery of the present time that scientists most dislike, and would like to get rid of, that is the presidency of our colleges.

The college presidency is robbing science of some of its ablest men, and one of the greatest sacrifices, we believe, which the subject of political economy has rendered is its gift to Yale University. We hope that President Hadley has not abandoned the work which he has formerly done in economics; that sometime he may be tired of the duties now imposed upon him, although we recognize their worth, but we also recognize that he can still be far more useful to our science with its great future.

I take great pleasure in introducing President Hadley of Yale University.

Arthur T. Hadley: Mr. President, Ladies and Gentlemen: My paper, I feel, deals with the past rather than the future. I am one of the "old duffers" to which the last paper referred; and when it was first suggested that I should speak tonight at the meeting of the American Economic Association, it was naturally of retrospect rather than prophecy of the future that I thought: although I am still not without the hope that when I have finished my work as a college president, I may as a yet older "duffer" still be able to do some work in the field of economics.

But, this is a time for retrospects. At least, I was so informed by the committee of arrangements; and, if my speech appears to have too much of personal reminiscence or too little of the seriousness which befits an anniversary like this, I beg that you will put due share of blame on the committee.

As my mind travels back twenty-five or thirty years, I see our officers and ex-officers in scenes very different from those of today. Dr. Ely was trying, with indifferent success, to get the Johns Hopkins authorities to take a proper view of the importance of political economy.

Giddings was spending his days and nights in the office of the Springfield Union. Why he did not grow thin under the strain, or why his smile did not come off in adversity any more than it does in prosperity, was a perpetual marvel to us all. Seligman and Clark were the plutocrats. They were real, full fledged professors. When Clark wrote a book on "The Philosophy of Wealth", it seemed to those of us who were struggling with poverty in the various departments of journalism and politics and unrecognized teaching activity singularly appropriate that he should philosophize on a thing of which he had so much and the rest of us so little. An economist who was in receipt of a fixed salary, to last during good behavior, could hardly be expected to do anything else but philosophize on wealth. Nor is it the economists alone whose presence I remember at our meetings, whether regular or casual. We fraternized with historians, and even with educators. Ours was not an exclusive society. In the language of a club to which I then belonged, we demanded only high intellectual attainments, fair moral character, a philosopher's digestion, and financial responsibility up to the sum of one dollar.

We were just beginning to revolt from what was known in those days as economic orthodoxy. John Stuart Mill had stated so positively that the English economists of the first half of the nineteenth century had left nothing of importance to find out about political economy that people supposed that what he said must be true. "I am the greatest violin player in the world," said an applicant for a position as first violin, to the manager of one of our leading orchestras. "That is interesting, indeed," said the manager; "how do you prove it?" "Prove it! Why, I don't need to prove it, I admit it," said the vio-

lin player. That was the attitude of the orthodox economist fifty years ago. You deviated from traditional views at your soul's peril. Bagehot doubted whether competition always worked perfectly. A few years of purgatory might be enough for him. Walker disbelieved in the wage fund theory. He might possibly hope to get to heaven if he spent several thousand aeons in all the laborious circles provided by Dante. But as for those nameless inconoclasts who presumed to advocate governmental interference with industry, hell had no depths sufficiently deep in which to bury their eternal infamy.

We have indeed seen changes. The old economic orthodoxy is gone—too much gone, some of us think, who, after helping to break down the fences, are a little astonished at the havoc made by the cattle that have come in through the openings. Gone, too, is the philosophy on which orthodox economics was based, the general view of life of which the older political economy was a manifestation.

The change which we see in economic doctrine is not in its essence a change in methods of reasoning. It is not, primarily at least, the result of discovering specific errors in the deductions of the older economists. Some such errors there doubtless were; and the discovery of these has helped to accelerate the change. But on the whole—let this be borne in mind for the good of our souls—the English economists of two generations ago reasoned rather more correctly and a good deal more vigorously than the economists of any country at the present day. The fundamental thing which has altered, is the world's mental attitude. Until a comparatively recent time, economists, in common with all other men, wanted to reduce everything to a few general principles. People based their ethics on Bentham's formulas regard-

ing happiness. They based their psychology on Spencer's formulas regarding progress. They based their economics on Ricardo's formulas regarding freedom. But the twentieth century is inclined to reject this way of doing things. It prefers to judge events of every kind, not by their conformity to some philosophical formula, but by their practical effect in preserving the life of somebody or something. Has a code of morals kept the race that held it alive while others perished? If so it is good. Has a law or an institution advanced the nation that possessed it in the struggle for existence with other nations? If so it is justifying itself. But what if it interferes with happiness? What if it violates our traditional conception of morality? The tendency today—I do not know that I should call it more than a tendency—is to say that this proves our traditional conceptions of morality to be imperfect and our traditional ideas of happiness to be outworn.

The present generation for the first time has wrought the consequences of Darwinism into its philosophic thinking. Darwin said, biological and social types are the result of survival of the fittest. His successors took the next step, and said, the fittest types are those which prove their right to the term by survival. It was vain to resist this change. Mill and his friends might say, the fittest types are those which make for happiness, as I was taught in my childhood. Spencer might say, the fittest types are those which are the most highly organized, as I am teaching the world in my riper years. But the world has insisted on following Darwin; and present day economics is one of the results.

How large a part the Economic Association has had in producing these results it is hard to tell. If we attempt to measure the specific work which we have done,

we cannot without undue egotism claim to have changed the course of the world's history. But if we consider the indefinable influence and intangible effects of this organization, I feel sure that they have been very great. This, I think, has been its chief service. Before our organization the men who are working on modern lines were isolated. Take the case of the leader to whom we all looked with unequalled confidence and affection,—General Francis A. Walker. What this Association meant to him, both as a matter of personal enjoyment and economic productivity, no one can begin to estimate. Before its foundation he felt himself alone. After it was founded he stood among friends. Instead of finding himself more isolated in the face of hostile criticism, he had a forum for the sympathetic discussion of views, where the things that he said helped a hundred others and where he, in turn, was helped by what others said and did. What was true in the case of Walker was true in the case of many others. The increased influence of economists and statisticians in the public life of today, is in large measure due to the influence, direct and indirect, of this organization. *Non multa sed multum.* It is not the number of members which we have secured, nor the number of books and pamphlets which we have published, but the aggregate change in the attitude of the American people toward expert knowledge of economic affairs which this Association can claim as its great and significant achievement.

PRESIDENT DEWEY: Every family has an adventuresome spirit who goes out into the world and conquers difficulties and achieves success, but only rarely comes back under the roof-tree. When he comes, he brings a message of interest. Professor Laughlin we have not

too often with us, not as often as we should have liked to have him, or as often as we should have warmly welcomed him. We are glad that he is with us tonight and will next address us in regard to our work. Professor J. Laurence Laughlin, of the University of Chicago.

J. Laurence Laughlin: Mr. Chairman, Ladies and Gentlemen: I assume I have been called upon as one of the "old duffers" who are represented as giving the teaching in the archaic age which you have heard so well described in the history of the American Economic Association by Dr. Ely.

I have today listened to an address by a president of one of the Associations who was my pupil; and another pupil of mine has been in the presidential chair of the United States and finished his term; and I might possibly go on, were it not that no professor should be held responsible for all the doings of all his pupils.

I assure you, Mr. Chairman and members of the Economic Association, that it is a great pleasure to me to be here tonight and to look back upon the many things that have happened in the development of economics during the life of this Association, and much within my own time. Especially is it a pleasure to be here and to realize what has been expressed this evening of the catholicity and openness to free discussion now assured to us in this Association, and throughout the country.

A young and lusty organization like this ought to have the freedom and range of a vigorous youth just entering on its period of achievement. Within my own short span I have observed its twenty-five years of youth, as well as the term of its predecessor, the Political Economy Club, which was organized at my initiative in 1883, founded

on the model of its English progenitor, and which had an interesting career as a dining club of economists within a limited territory on the Atlantic from Boston to Washington. Although in organization suited to a compact society like that of England or France, the Political Economy Club—even though it included men like Hugh McCulloch, David A. Wells, Horace White, Simon Newcomb, Francis A. Walker, Charles F. Dunbar, Charles F. Adams, and William G. Sumner—was not comprehensive enough for a country with an area as wide and with economic interests as diversified as those of the United States. The mere material growth of our country demanded a broad and catholic consideration of our miraculous progress in wealth, quite apart from the more important fact that after our Civil War an intellectual ferment began to work in economic thinking which has distinguished our country beyond all others; so that today the serious and eager attention given to economic studies in America, both in Academic and political life, is a phenomenon which excites the liveliest attention among economic students in Europe. Therefore, the variety of interests, the number of our problems, and the significant awakening in economic thinking are in themselves sufficient reasons for the existence of a country-wide organization of American economists.

The breadth of our economic development has left its mark on the constitution and activities of this American Economic Association. The narrow and special tenets contained in its initial constitution inevitably gave way to a more liberal charter; and this widening of its point of view in economics, is of that character out of which only true progress in intellectual achievement is possible. It is not out of agreements, but out of differences that we receive the greatest gain; and the very diversity

of region, institution, and environment represented in our membership is the best promise of its usefulness now and in the future. A policy based on points of view representing widely different interests is much more likely to be sane than one which might interpret the views of some limited region of our great country.

In a comparison of ideas coming from diverse sources and from varying kinds of training, there comes into operation a possible reversal of Gresham's law. In the intellectual free coinage of thinking, it is the better coin which drives out the poorer. In the exchange of ideas, where there is no fear or favor, it is the best which sets the standard. Here we have the true justification of an association like this in which all are equals, and in which no one asks for his views more than the currency given them by their content and incontrovertible value. Discussion is welcomed—full, frank, and free discussion. When men are isolated, or when forced to work out their results without attrition on the minds of others, it is the poorer intellectual coin which is likely to circulate. Without contact with the better standards, the poorer remains in circulation in the undisturbed haunts of local provincialism. It is in an association like this, where any man can test his thinking against that of any other, that the survival of the best is inevitable.

The unquestioned service which the American Economic Association renders to us all is to provide us with a testing ground for all our inventions; to find out what is weak and what is strong in our performances. What gives us confidence is the belief that the decisions are given without collusion or favor; that we are all standing on a level, and all have an equal chance. If the belief ever became fixed that the dice were loaded, that manipulation by a political machine were regulating the affairs

of an association like this, its usefulness would be at once seriously impaired. It is the vigor of its youth, the breadth of its thinking, the fairness of its discussions, the high quality of its leadership, which means everything for our future.

It is of especial advantage that the smaller colleges all over the land should be represented in our organization. They come close to the heart of the communities, the real basic elements of our economic life, on which, in any final analysis, our future as an economic power really depends. The larger institutions may set the standard and excite to research, but the economists in the smaller colleges must always remain the active purveyors of general instruction to the body of the people. At any one moment, it is not what the few investigators think, but what the great class of college instructors, together with our journalists, think and teach, which determines what the public shall believe, and thereby what our state and national legislation shall be. These laborers working in the vineyards even at high noon, overburdened and underpaid, are worthy of their hire and of our unstinted admiration.

Perhaps we have not had, as an association, as great and direct an influence as we should have upon the national economic policy. It is a question whether our lives and our thinking have not been too much detached from the concrete problems of the business world, thereby resulting in an unnecessary limitation of our influence. But, more likely, something of the disregard and condescension with which we are looked upon by the world of business is to be attributed to our own fondness for metaphysical subtleties. It is a curious fact, however, that in Germany, the most theoretical country in the world, the economic teaching is excessively practical, while in the

United States, the most practical country in the world, the economic teaching is excessively theoretical. Is it not possible that there is with us a maladjustment of our intellectual powers to our economic opportunities? This suggestion is not to be taken to mean that a body of economic principles is of second importance; on the contrary it is of the first importance. Paradoxical as it may sound, our ends, no matter how practical, must be solved by means which are theoretical. But that which is theoretical is not necesssarily obscure; and, if we are to obtain and hold the leadership in economic instruction, especially among business men, we must learn the trick of clear and direct exposition. Sooner or later, the incomprehensible metaphysical nomenclature must come to be regarded as a kind of intellectual cypher, to be read only by the experts, but to be always translated for the general student into the English of ordinary communication.

The time has gone by when competence in economics can be regarded as the monopoly of any few economists, however seasoned by authority, age, or experience. Too many trained, strong minds are now eagerly engaged in the economic field to warrent any complacency by a few. Moreover, it is not merely the constitution of England that is "in the melting pot"; the whole economic future of our country is also now "in the melting pot." The tariff, our monetary and banking system, business organization, the position of the workingmen, have been thrown into the crucible, and are to be refashioned. Here are titanic questions. Are we of the stuff to meet these tasks? No longer can our civilization, our productive power, our leadership be said to be confined to the narrow strip on the Atlantic seaboard. Vigor of economic thinking is to be looked for in the newer West quite as much as in the older East. The smaller institutions of the West and the South

must be reckoned with more in the future than in the past in the work, and guidance, of this Association. More and more we must lean upon them for the moulding of a sound public opinion in economics. To meet the great tasks laid upon us in forming our national economic policies, this Association must know and share the life of the whole—not a part—of our wide civilization.

PRESIDENT DEWEY: During the past twenty-five years, those of us who have visited London found a friend who generously helped us in our professional errands of investigation; and by his books he has stimulated us through the treatment of his subject in a deep and profound spirit. Now, this friend for whom so many of us have a warm, personal affection, has, for a short time, transferred his residence to this continent. We wish he were nearer than Ottawa, but we are glad that we have been able to persuade him to be present with us. I have great pleasure in introducing Mr. James Bonar, Deputy Master of the Canadian Branch of the Royal Mint.

JAMES BONAR: Mr. President, Ladies and Gentlemen: Your kind hospitality has made this an international gathering, as I see representatives not only from all parts of the New World, but all parts of the civilized world. I cannot pose, myself, as a representative of England, as I have been two and a half years away from it, nor could I represent England here tonight, as England has a more distinguished representative in the person of Mr. Higgs. I could not represent Canada, as I have been there only two and a half years. I stand here as an individual who has received much help and friendship from the members of this Association during its period of life, from the beginning onward. And I am glad of

the opportunity of expressing my gratitude; even if I said nothing more and sat down, I should still feel I had relieved my mind by expressing my gratitude to you all.

I think it is one of the great functions of such an association to form such friendships, for I consider where mutual help is followed by friendship it is much more effective and lasting.

One collateral effect of that in the case of this Association, and also in the colonies generally, is that it mitigates the rancor of debate—I was about to say the ferocity of debate—but the discussion here never rises to any such stage, as economists are philosophers. When they quarrel, they quarrel as men do who know they are one day to be reconciled.

Our friends the philosophers will say, "It is all very well for you to be moderate and temperate in debate, you never get below the surface." Well, there is a little truth in that. We do not try to get down so deep as they do, but some of our problems affecting the daily bread of millions are tolerably vital. But the real reason was mentioned by Professors Hadley and Laughlin as absolutely vital to us. We can think over an idea in our studies, and, having thought it out, we must discuss it; and that necessity for discussion and testing is laid upon the economists more than upon any other student of human nature. And since we feel every day the pressure of criticism and discussion as we feel the conditions which we are discussing, criticism and discussion do not irritate us; and so we do not use such intemperate language as other men.

This discipline of thought followed by discussion, to which you have been inducing such large numbers of young persons of both sexes in this country to submit, is a very unique phenomenon; and that phenomenon of

a vast number of young men engaged in studying political economy is one of the wonders of the New World to anyone coming from the Old World.

I think nothing so strikes the economist from the Old Country when he comes to America as finding such large numbers of professors who are ready to teach, and so many students who are eager to learn. We find no such numbers in England or in Canada. It is one of the phenomena of the New World. This phenomenon is of vast importance for the welfare of the country, not only morally but intellectually and politically, for as said by others of my friends, the philosophers, "We may doubt whether it is wise to have a philosopher for a king," but no one in this room but believes that it would be a boon to have an economist for a king. When you see that vision fulfilled fifty years from now, then I know it will be at once a cause and an effect of the prosperity of this Association.

Before I sit down, I should like again to congratulate the Association on its longevity. My friend, President Dewey, wanted no one to get up on this platform who was not willing to praise the Association; and I should like to give my humble congratulation to the Association on this anniversary of its longevity.

When you have so many youth preparing to take up the torch of knowledge and liberty, you may be sure that, whatever happens to this country in the future, this body of young men will also, as far as in them lies, bear a message of peace and good will, rather than the contrary. I do not think I can add anything to what I have said further than to reiterate my appreciation of your kindness and hospitality. I wish I had the eloquence of Gladstone or Cicero to express my views. To the individual members of the Association, particularly the older

ones whom I have known, I wish to express my appreciation, but also to all of the members of the Association, as a humble unit benefited in many ways by the American Economic Association. To the President I express my gratitude, as well as to you all, for allowing me to take part in celebrating with you this occasion.

PRESIDENT DEWEY: We expected President James, of the University of Illinois, who had so much to do with the founding of this Association, to be present with us tonight. Unfortunately, he is ill, but he has kindly commissioned his son, who comes from the University of Illinois, to bring a written message. Mr. Herman James will therefore read a brief message from his father, one of the founders of our Association.

EDMUND J. JAMES: I cannot undertake to speak definitely as to the men who may have first suggested the organization of the American Economic Association. I can only give an account of my own connection with this movement, and whether it will appear to have been earlier or later than that of somebody else will be evident from the accounts which other men may give of their own experience and their own work.

I believe that I was one of the first of the Americans of my generation to go to Germany for the purpose of studying economics and politics. With Professor Joseph French Johnson, now Dean of the New York University School of Commerce and Accounts, I landed in Germany the first of August, 1875; and we two entered the University of Halle on the 15th of October following. A few months after, Dr. Simon N. Patten of the University of Pennsylvania, turned up at the same institution, and a year or two later Dr. Richard T. Ely, Professor of Economics in the University of Wisconsin. About the

same time other men went to other institutions, and the middle of the 70's, therefore, may be properly characterized as the time when Americans began to resort to Germany for the study of these problems.

The *Verein für Sozialpolitik* had just gotten fairly to work, having been organized in October, 1872. Dr. Johannes Conrad, Professor of Political Economy in the University of Halle, called the attention of his students to this organization and its work in one of his lectures, dwelling upon the causes which had led to the establishment of this organization in order to find a voice for new sentiments and new developments. It represented a protest against the extreme tendencies of the so-called orthodox school and *Manchesterthum* as represented by the *Volkswirthschaftlicher Kongress*.

I remember very distinctly Conrad's speaking to us Americans who were in his seminary one evening, urging us to organize a similar association in the United States upon our return, emphasizing the fact that times were changing. The old order was passing away, and if economic students were to have any influence whatever upon the course of practical politics, it would be necessary to take a new attitude toward the whole subject of social legislation, and if the United States were to have any particular influence in the great social legislation and the great readjustment of society on its legal side which seemed to be coming, an association of this sort would have very real value. I decided then that, as soon as I could, I would begin the agitation for such an association.

For the first five or six years after my return to the United States, I was engaged in secondary school work and could give to the further development of my economic studies only a very small portion of my time.

Finally, in 1883, I broke away from secondary school work and spent some months in Europe, again preparing to take up college work. In February, 1883, I made a visit to several of our leading American institutions. I remember very well on this occasion having held interesting and, to me, very profitable conferences with Henry Carter Adams of Michigan, Arthur Latham Perry of Williams, Dunbar and Laughlin of Harvard, John B. Clark of Smith, Sumner and Farnam of Yale, Francis A. Walker of the Massachusetts Institute of Technology, Smith and Seligman of Columbia, Richard T. Ely of Johns Hopkins, and Robert Ellis Thompson and Albert S. Bolles, Jr., of Philadelphia; and with all of them I raised the question whether the time had not come for the organization of an economic association of the sort suggested above

I found a general agreement that possibly such an association might do useful work, but in some cases also the view that the American Social Science Association practically performed the only available function of such an organization.

Upon my return from Europe in the autumn of 1883 I entered the University of Pennsylvania, and here I took up again at various times the agitation in favor of a new organization which should have quite a different attitude toward our economic problems from that which was characteristic even of the Social Science Association, broad and liberal as that was.

My own feeling then—and I may say it has not altered since—was very strongly in favor of an organization with a definite program and platform,—that is to say, as definite a program as the *Verein für Sozialpolitik* had; a declaration, if you please, that the time had come for a new attitude and a new outlook and the elaboration of

a program, if possible, upon which those economists who were willing to join in such an association could agree.

I am free to say that I found but little sympathy for this particular proposition, and, when it was evident that I could not secure the coöperation of any large number of men upon the basis which I proposed, I was quite willing to do the next best thing, and join in with other men and do what I could toward making an organization of the economists upon another basis, believing that in the long run time and tide and circumstance would be on my side and in favor of my views.

While we were thus discussing among ourselves on many occasions and with many different men this project of an economic association, I worked out in some detail with Dr. Patten a scheme for such a society as I had in mind. The program was elaborated during the winter of '84 and '85, and sent around to a good many friends as a suggested basis for action. Dr. Ely has given in his address this evening the project submitted at that time.

From that time on I did what I could to assist in the organization of an association which subsequently became the American Economic Association. I had the honor of being the chairman of the committee which drafted the constitution, was present at the first meeting, and did what I could for the first seven or eight years to give the organization an impetus. I was elected second vice-president for the first year, and made chairman of the Standing Committee on Transportation.

I believe that the Association has done good work. It was of special value to me as a means of getting acquainted with my colleagues, of presenting to them for discussion and criticism my ideas upon various subjects which were considered. It was a means of magnifying,

so to speak, the calling of the academic economist and securing for his position a place of respect in the public mind at large.

I should not feel that I were doing full justice to the facts in the case if I did not emphasize, what I have taken opportunity to say on many different occasions, that the Economic Association and the economists of the country owe a great debt to Richard T. Ely, the first secretary of this Association, for his untiring industry and devotion, as secretary to the society. He was the efficient, administrative officer of the organization and laid us all under a debt of obligation. Without him I do not believe that the Association would have been formed at that time or succeeded so well.

PRESIDENT DEWEY: That concludes the addresses of the evening. The next thing in order is the business meeting of our Association.

# THE PHENOMENA OF ECONOMIC DYNAMICS

ABSTRACT OF PAPER BY M. PANTALEONI.

The object of this essay is to examine the causes of four types of economic change. The first consists in variations of the extension of the zone of economic activity; the second in variations in the apportionment of the total expenditures of productive enterprises as between general outlays and specific ones; the third consists in variations in the structure of the population; and the fourth in variations in those descending curves which represent gradations of costs of different increments of products.

The first part of this study may be passed over rapidly by those already acquainted with the theory of economic equilibrium. It serves to distinguish the kind of dynamics with which economists for the most part have busied themselves from the kind which I present here. The second part of my paper deals with this second class of phenomena. The ruling idea in economic studies following those of Adam Smith was *wealth*. Later it became the idea of *value* and is so still in the case of many writers. The science has contained in a sporadic shape much material for a science of economic equilibrium, such as has been suggested by Pareto in a work which makes only a beginning of a study of Economic Dynamics.

Every static equilibrium represents a point in a dynamic development and a static theory is naturally merged in a later theory of Economic Dynamics which is not yet realized, owing to the lack of facts and the intricacy of those we have. It is here proposed to call attention to three further forms of dynamic phenomena. Two of

these are of such a kind that after they appear and disturb a static adjustment the equilibrium restores itself or a new one is created; while after a disturbance of the third kind the equilibrium does not return. Agitation may continue through a period too long to fall within our purview, or long enough to allow a non-economic system to substitute itself for the present economic one. The dynamic influences that we study then are of two sorts: first, those which lead to an equilibrium, and, secondly, those which do not lead to one which can be foreseen. Most of the studies which make the distinction between statics and dynamics confine themselves to those of the first kind.

In describing dynamic phenomena comparisons are used which were formerly taken from mechanics, but now more usually from biology. Economic agents are thought of either as molecules subjected to equal pressure in all directions, or, on the other hand, as parts of a living body subjected to equal stimuli, which are mutually counteracting. There is little use in disputing as to which method is better, since the useful thing is to apply a method rather than to argue about it.

We may first examine a static equilibrium, and then consider the antecedent movements which have brought it about or those which, when it is disturbed, will either reëstablish or create a new equilibrium. In the latter case the study is one of Economic Dynamics, which may be defined as a study of movements of disequilibrium, which lead to positions of equilibrium.

When an individual spends his income so as to bring into a proportion the marginal utility of different articles within his purchasing power, the equilibrium exists and is rightly called static, because it will continue indefinitely and return if disturbed. Until this condition is reached,

modifications in his demand or in his supply are likely to take place, and the quantity of the goods coming within his reach will change and these changes affect both the man himself and the persons he deals with, involving both the quantity of goods available and the incomes of different producers. The state of equilibrium yields the maximum of satisfaction relatively to the initial position and to the changes which this allows. The application of any raw material to new uses brings about such a change, which is a dynamic phenomenon. During the period of disturbances each sale made in the open market helps to bring about a new equilibrium.

Alteration of the condition of exchange is also a dynamic influence, and increased accumulation of capital by saving tends toward equilibrium between the utility of consumers' goods and that of instruments. Free competition is here a recognized force, and other forces may not help to create an equilibrium. The question arises whether when disturbances take place the forces at work lead not to the previous status but to a new one. Is this a dynamic effect? Is the new equilibrium static? If the new one is not identical with the preceding one but results from the same fundamental causes, we may regard it as static.[1]

Wherever two kinds of goods can be substitutes for each other and are therefore competitors of each other in particular uses, there is an opportunity for a static equilibrium and for a disturbance of it. This happens

[1] The essay here cites Clark's theory, which starts with a study of equilibrium and then examines the disturbances which tend to bring about a new equilibrium, and compares the new equilibrium with the preceding, in order to identify and measure the forces of change. It refers to Pareto's system already mentioned and to Keyne's study of the value of gold and Ricardo's depreciation of bank notes as specific illustrations of a similar method of study.

when wool competes with cotton, gas with electric light, iron with wood, etc. When prices stand at a given level, there is a definite use of each one of these articles; but if the demand for any one be changed while the supply remains the same, or *vice versa,* the disturbance takes place.

There is a second class of factors which alter the economic structure and do not lead to restored equilibrium. Four cases of such action are here noticed.

*First case:*—In every society purely economic motives have an extending or contracting radius of activity; in other words, the zones of economic action grow larger or smaller. In that case purely economic doctrines have a varying sized world to apply to. As Pareto says, "Man's actual conduct resembles that of the *homo economicus,* or that of the *homo ethicus,* or that of the *homo religiosus.* It is sometimes a composite of all these characters. There are concrete phenomena in which the economic influences transcend all others, and here it is possible to consider alone the results deduced by economic reasoning; while there are other phenomena in which the economic constituent is insignificant and may be neglected. There are still others which are intermediate in character." To this we in the main agree, but find it necessary to examine variations of the zones in which all these *homines* move, and we must notice that even the *homo economicus* in his own proper capacity is modified when he enters into a composite with the others.

The causes of the changes in the zones of activity are many, but one consists in the substitution of public enterprises for private ones, which leads to new prices for the factors in production and new rates of wages. These differ from those yielded either by competition or pri-

vate monopoly. There is an effort to make them conform to ethical or political criteria and to cause the general results of demand and supply in the market to give way. As the ethical and political system grows, it trenches on the economic zone and reduces the earning power of labor in the residuum of it.

In civilized lands the economic zone is increased by inventions, and it absorbs areas of the ethical and political zones when the motives for extending the latter are weak. In such lands, however, the economic zones are in turn easily the subjects of invasion, and they lose certain ground so that notwithstanding their extension in other directions their general growth is reduced. Railroads are federalized, which is trenching on the economic zone; but automobiles and aeroplanes are introduced, which is extending it. The telegraph has been taken by the government and wireless telegraphy remains in private hands.

An ethical influence which shows itself in changes of opinion and of custom enlarges the industrial sphere of women. This is very large as compared with that which existed among Moslem peoples. The prevalence of the so-called just prices for goods or "living wages" for labor is an attempt to make rates conform to some idea of an ethical adjustment, which, though nebulous as far as definition goes, still has its effects. It is a short step from prices established by custom to those established by a legal tariff. Extra-economic prices are established, not by the leveling hands of competition, but by moral and legal force. Wages which are made to conform to needs or must range above a legal minimum, and prices of goods established by governmental edict, are cases in point; and so are the public regulation of house rent, and the laws against usury. The efforts of trade unions are directed toward a rate of pay the basis of which is some

ethical standard. A society subject to these influences is only partially economic. It has something in common with a beehive or an ant-hill. There may be furious economic dynamism before a stable condition is reached and then commotion ceases. It may reappear, as in the case of bees when the hive is shaken, and after such a disturbance it may return to a stable condition.

There are two conceptions of this condition in which non-economic motives are active. Humanity may be thought of as pushed by forces ethical and political towards a certain goal, while the economic forces present obstacles; or, on the other hand, the economic forces may be treated as the principle ones, and the ethical and political forces as causing variations and disturbances. The one conception or the other is the truer according to the circumstances of a particular period.

*Second case*:—An important change is the absorption of the specific expenditures of an industrial undertaking into the general expenditures. This takes place in consequence of changes in the dimensions of the undertaking. The distinction between the two classes of outlays is not an arbitrary one. The actual absorption of the one class by the other is a salient practical fact which has been noticed, but not identified for what it actually is. Collectivism seems to be growing in consequence of certain substitutions of general expenses for specific ones; and yet it is often ascribed merely to a change of opinions. In fact, there is often a great reduction of aggregate outlays by the substitution of one kind for another. Some persons regard the growth of state socialism as consisting merely of the absorption by the state of expenditures formerly in private hands, or in the tendency toward an increase in public budgets, or in the substitution of imposts for taxes, or that of a general taxing of incomes for more

specific taxes. Others say that political unities tend to increase by absorbing the smaller enterprises formerly in private hands, and others that international syndicates of a private kind do so by absorbing small companies. All these are aspects of a more general phenomenon, namely, a new distribution of expenditures.

The limit beyond which the economics of centralized production cannot go is the complete saturation of the market to which entrepreneurs can resort. In modern times these markets are enormously great, the enterprises are proportionately so, and with this development has come the growth of cities and that of aggregate wealth, and changes in laws and customs. These extensive social and political changes on the one hand, and the reappointment of costs of production between the general and specific varieties on the other, act upon each other. The great social changes and the underlying political forces are to each other as both cause and effect.

The growth of great enterprises is attended by risk, since the capital once invested in them cannot be withdrawn, and a miscalculation involves a sweeping loss; and, moreover, the elements to be taken account of in estimating the chances of success are very various and must take into account not only technical facts and economic movements but such super-organic machinery of production as political institutions, public intelligence, and the forces of morality.

*Third case*:—In connection with the changes of the structure of population we consider only one, that which results from Neo-Malthusianism. The diffusion of this has been rapid in civilized countries. An active propaganda has been carried on which extends widely a knowledge of the problems and a means of solution. An increase in education has brought all classes of the people

within the influence of this propaganda. In Holland pamphlets are published which are sent to families with or without their consent; and elsewhere the advertising pages of newspapers serve the same purpose. In Protestant countries religion affords no obstacle to this, and in Catholic ones the reduced influence of the clergy is weakening the obstacle that there exists. Clearly whenever the women of a country are converted to the modern view it will have a controlling effect in life.

Neo-Malthusianism is general in proportion to the progress of civilization, and its consequences are of the utmost importance for the structure of all population. In nearly all countries there is seen a certain gradual approximation to the French condition of a reduced birth rate and a generally constant number of the population. In a society which is so transformed, the costs incurred in rearing an individual to maturity are greater than they formerly were, but they yield as a product a man of a better quality. This is attended with greater accumulation of capital, better instrumentalities of production, and a higher standard of living. They may result favorably on the hygienic condition of the people, or they may have the opposite effect, depending on the customs of the people and the political and moral influences which are brought to bear upon them. Within the population the grading of the fecundity of different classes and the relative death rates show a certain correspondence with the gradations of income. Until recently the excess of the birth rate over the death rate, which may be termed the net birth rate, has shown itself in the case of classes having the larger income, since in the other classes the greater death rate has reduced the net increase.

This comparison no longer holds true, since the net birth rate in the superior classes is now smaller. There has indeed been a check on the birth rate in the case of the

lower classes, but because of a number of social gains. there has been a check on the death rate, leaving as an aggregate effect the securing to these more ill paid classes a larger resultant increase. As the working classes are enabled to raise their standard of living, the resultant rate of increase on the whole becomes smaller and approaches that of the higher classes.

*Fourth case*:—On this subject the first studies were by Marshall and Cunningham. The studies of the former were first published in 1867 in "Papers for Private Circulation" and have been published since in Appendix 5 of the sixth edition of his "Economic Principles." This study is generally interesting as belonging to dynamic studies of the first class, the only class indeed which Pareto discusses in his Manual. Goods of universal consumption have, in their initial increments, larger utilities than do other wares. They show a decreasing cost extending over a long period of time. The effects are not limited to furnishing problems of unstable equilibrium. They amount to a revolutionizing of the economic world —a dynamic effect of the second class. Cereals show diminished cost of production in new countries, since capital and the laboring population can be gathered at pleasure, and the carrying costs which are chargeable to a finished article grow still smaller as the raw material is worked up at or near the places where it is produced. When flour is transported instead of wheat it can be sold at the place of consumption at a lower price than would be possible if it were there manufactured. Moreover the reduced costs of transportation have the effect of moving great populations *en masse,* so that with the cultivation of new land there can be a quicker growth of labor and capital. It is not necessary that the three ele-

ments should increase in a symmetrical fashion, but any augmentation of either of them increases the product of the combination. An abundance of land is bestowed freely on settlers. Cheaper carrying and plentiful capital are elements of diminishing costs of the necessaries of life.

This kind of economic dynamics mingles races of men and creates new races with new tastes, methods, costs of production, and social organization. It is like alloying one metal with another. But all modifications are less far-reaching than those of the physiological cell which comes about by cross-breeding. In the new lands the favorable effects appear and in older ones the reverse. In the latter is seen the economic retrogression, though in their backward march the decaying societies do not follow the route which they passed over in their progressing march, but mark out a new route. If iron is found in proximity to coal; if veins of oil are large; if the country has a quasi-monopoly of the products of cotton and tobacco and is peopled by a race which by natural selection has become one of the best; if its social and political institutions are such as to allow men to rise unhindered by institutions; if the cost of national defense is negligible; then many of their industries will show diminishing costs for long periods of time. These favored industries will not suppress others. In some there is centralization as particular enterprises succumb and reinforce those that destroy them; and both labor and capital derive advantages from these displacements. The country gets imported goods by exporting goods of decreasing cost, with a resulting diminution of the outlays involved in maintaing its standard of life. Such adjustment of prices takes place that the fruit of technical and economic gains in one department may be shared by the

men in other departments. There comes about a favored territorial localization of industries of each class. What manner of dynamics is this? It deals indeed with *hom-ines economici* but its effects go beyond the limit of other studies which do so and transcend all dynamics of the first order.

# THE PHENOMENA OF ECONOMIC DYNAMICS —DISCUSSION

J. B. Clark: It is only with reservations that one may offer critical comments on a paper by an absent author. The abstract which I have read may or may not have done full justice to the complete essay. It has doubtless been perceived that Professor Pantaleoni speaks of a "non-economic zone" within which ethical and political forces are in control. Within this zone, however, the phenomena of wealth appear, and this according to our customary use of terms will suffice to give it an economic character. If the political powers were in the fullest possible control, as they would be in a completely socialistic state, activities of an economic kind would still be in progress. They would be dominated indeed, not by competition, not by the spontaneous action of private individuals, but rather by the conscious action of a government. The adjustment of the comparative value of goods and of the laborer's returns would not come about, as it were, automatically, but all such determinations would be affected through the agency of officials. The distinction which we perceive is between a competitive zone and a non-competitive one, both of which are economic.

Secondly, the theory of the increasing returns of agriculture in a new country may describe something which actually takes place without contradicting the accepted theory of diminishing returns from agriculture. During the interval within which the area of tilled land is steadily expanding the methods of tillage may, on the average, become less and less intensive. Near the frontier much land is used per unit of labor and of capital;

and, as the frontier extends, zone after zone of land used in this extensive way is annexed to the central area. During this process of extension the actual cost of produce in the country as a whole may grow less, in a way that is quite in accordance with the law of diminishing returns. Other dynamic changes than those just mentioned may contribute to the diminution. There is nothing in this which contradicts the assertion that on any particular piece of land cultivation tends, in time, to become more and more intensive, and that the returns per unit of labor and capital there employed tend to grow smaller.

Thirdly, in describing as dynamic forces those which tend to bring about a state of equilibrium, Professor Pantaleoni defines one of two varieties of force to which the term dynamic may be applied. The surface of a reservoir is now level, though at some earlier time it was not so. One set of forces has produced the even surface, but there was an earlier time when other forces disturbed it. If hereafter a flood should inject a quantity of water into the reservoir the surface would again be disturbed, though after the flood there would be a new equilibrium established. Influences that create the static adjustment are of one kind and those which disturb it are of another.

An essential fact is that the new surface is at a higher level than the old one, and, if the flood should be repeated, the surface would afterwards stand at a higher level still. Something of this sort is continually taking place in the course of economic evolution. Under conditions of prosperity there is a certain standard of wages, and there are forces at work which tend to bring about the adjustment of the actual pay of laborers at rates conforming to this normal standard. They tend to bring about an equilibrium between whatever tends to raise

the rate of pay and whatever tends to lower it. Another set of forces tends to destroy this equilibrium and erect a new standard of pay. As soon as this is done the forces of the first kind impel the actual pay of labor toward its new and higher level. An indefinite series of such changes would mean a norm of wages perpetually rising and actual wages pursuing the rising norm. It is the influences that change the norm that would seem to be dynamic *par excellence.* If we change our figure, we may liken the advancing standard of wages and the pursuing actual rate to a tug attached to its tow. The line that holds them together may be elastic and the distance between them a variable one. The line is certainly one of the causes of the movement of the tow; but the primary cause of all is the forward movement of the tug. The original dynamic agent is the tug's boiler with its furnace. Those forces which cause the *standard of pay* to progress, rather than those which keep the actual pay within reach of the standard, would seem to be the primary dynamic ones. Inventions, the discovery of new ores, the opening of new lands, etc., are not the things that bring about an equilibrium. They change the level at which thereafter an equilibrium will, by another set of forces, be brought about.

Fourthly, the most available general order of study would seem to begin by carrying through a fairly complete analysis of economic phenomena on the basis of competition. Extended studies, both static and dynamic, may be made on this assumption. When the complete results of competition are known and tabulated, it will be possible to study and measure not only those obstructions which modify the results of competition, but those causes which trench upon the strength and scope of the competition itself. It would be like computing the num-

ber of horse power generated by an engine on the supposition that the coal in its furnaces is burning freely and then making allowance for the fact that the fire is at times dampened by water from a leaky boiler. Both extensively and intensively political forces may trench upon competition. Governments may take over some industries altogether, and they may change the character of industries which they do not thus assume. The clearest knowledge of the effect of such changes can be gained after a preliminary study of a system that is wholly competitive.

In welcome contrast with all questions concerning concepts, terminology, and detailed method is the general fact of the enormous gain that is made by introducing into economic studies such a systematic and purposeful study of dynamics as Professor Pantaleoni has made. It is of incalculable advantage consciously and in a thoroughgoing fashion to isolate the problems of rest from the problems of change. In connection with the problems of change we shall have before us a study which bids fair to occupy the attention of economists for an indefinite period. They are problems of causation, and the solution of them is the only means of gaining an understanding of the present or of making a rational forecast of the future. What has brought about some fact of common knowledge? Why are prices so much higher than they were? Is there a permanent influence tending to make them rise? Are there other influences tending to make them fall, and if so, which of the two sets of forces will control the movement? Questions of this kind and a hundred others almost equally vital need to be answered if we are destined ever to comprehend the conditions that control human well-being. A study engaging the full power

of economists and statisticians will end by giving us unquestionable laws of economic change. The method of study will be realistic and its results will be a knowledge of permanent facts. This development will put an end to the baseless accusation sometimes heard that economic science is dealing with unrealities. The phenomena it records will be real and the causes it discovers and verifies will be equally so. The generalized statements of causes which rise to the dignity of permanent laws will be facts as truly as any others. Such is beginning to be the political economy of the present day, thanks to studies of the Laws of Dynamics, of which the paper of Professor Pantaleoni offers a fine illustration. As far as possible will all such study be from any discarding of deduction, or from any inhibition of the use of reason. As far as possible will the results of it be from a blind and purposeless jumble of facts. It will be illuminated by theory from the first and throughout. It will test and verify or reject the theoretical statements that are now taking systematic form. The scientists of the future will make of the fact-collecting process, to which many economists are giving themselves, a means of testing theoretical formulas. It is verified law, the systematic statement of which is theory, that we shall have as the fruit of it, and it will be something as important as it is realistic. How much depends on the law of wages, as it will be established by the statistician's tests? Nothing less than whether the majority of a population will be well off or ill off under given conditions. What is immediately tested is a bit of theory, but what is actually determined is the future of humanity.

S. N. Patten: The paper of Professor Pantaleoni is an earnest attempt to give definiteness to the contrast between the static and dynamic, in which I find many valu-

able suggestions. I am not however convinced that he has solved the difficulties, for it is not easy to separate economic problems into two classes for which distinct groups of laws may be formulated. I was the first economist to use the contrast between the static and dynamic and I am also the first to abandon it. My success and failure are, I think, typical of what others have done or will do, and hence to speak of it may have more value than a direct criticism of the plan before us. The reasoning of the older economists was based on the thought that England was a normal industrial nation and that free trade nations were superior to those that adopted protection. These premises I rejected, and contended that the great protective nations, Germany and America, were progressive while England was stationary. To convey this thought I introduced the contrast of static and dynamic, and used it to help make emphatic the backwardness of England and the superior energy of Germany and America. The thought when presented was novel, but the progress of the past twenty years has made it a commonplace. No one would now say that England was the normal industrial community whose policy should be imitated by other nations, and with this change in viewpoint the value of the contrast between static and dynamic disappeared. The one normal economy is dynamic.

Professor Clark has utilized the contrast by giving it a new content. With him the static is the natural and on that basis he has restated the fundamental doctrines of economics in a valuable and original way. But if the normal and natural is the static, what is the dynamic? On this point Professor Clark has given us many promises, but thus far they have been unfulfilled. The objection I raise is not as to the value of discussions of static economics in the sense of the natural and the normal. All economics have been of this class. But there must

be a valuable field of inquiry found that is not static before the contrast between static and dynamic becomes fundamental.

I do not wish, however, to imply that the introduction of the contrast has not yielded important results. We can investigate the various kinds of equilibrium earlier and more readily than we can the phenomena of a whole society. Valuable as this work is, we should remember that it is only particular functions or parts that are at equilibrium and not a whole nation. There is no such thing as static forces or static societies, but there are static functions in many if not in all societies. That a given part or function is out of equilibrium does not imply a static society but only a waste in its forces, while an equilibrium means economy. If the population of the world should become properly distributed and hence static, the world as a whole would not become static but more dynamic. So too a right distribution of the world's capital would make the world not less but more dynamic. If every function of society were at an equilibrium, that is, if its forces were so adjusted that there was no waste, the whole world would be intensely dynamic and would move forward with a vigor that as yet no nation has realized. If we keep in mind that static laws relate to parts, groups, and functions, while dynamic laws relate to social progress, the unity of economic science will be seen at a glance. There is no dynamics of functions: they are either at equilibrium or out of it. There are also no statics of social progress. Societies either progress or decay: they do not tend toward a state of stable equilibrium. If this be true, the term normal is better than static when we are treating of parts, while progressive is more expressive than dynamics when society as a whole is under consideration. Dynamic charges are so largely extra-economic in their origin that they cannot be

ignored; but when definite economic groups or functions are under consideration there is a gain in regarding the non-economic as a disturbance that may be ignored. The formulation of economic laws demands this, while a statement of the laws of progress is more effective only when the points of the equilibrium are in turn neglected and society is viewed as a flow of events rather than as a group of stable conditions.

FRANK A. FETTER: The subject that Professor Pantaleoni deals with in this paper is undoubtedly of importance. The study of it, to be profitable, however, must proceed from clear definitions of the terms dynamic and static, as used in economics. They are figures of speech and may easily lead along mistaken lines of inquiry. I shall therefore confine myself largely to the first part of the paper which Professor Pantaleoni regards as merely introductory and almost self-evident, and in which he discusses the nature of dynamics in economic study.

Apparently three different kinds of contrasts appear and reappear kaleidescopically in Professor Pantaleoni's discussion. The first is that between different kinds of phenomena, static and dynamic phenomena. The second is that between different kinds of economic study, static and dynamic economics. The third is that between different kinds of societies, static and dynamic societies. Professor Patten has just shown that a fourth contrast is possible and that he understands it to be that between static and dynamic men. It is evident that no two of these concepts have the same content.

### I. *The Distinction Between Static and Dynamic Phenomena.*

Mainly, Professor Pantaleoni seems to have in mind the first of these distinctions. Two or three times he puts

it that way as when he speaks of "recent economists applying themselves to the distinction between static and dynamic phenomena" and when he speaks of the "first fruitful use of the distinction between the static and dynamic phenomena." But he does not appear to adhere consistently to this thought. It is pretty clear that he means in these passages just what he has before spoken of as dynamic phenomena in general, the static phenomena of these passages being what he usually calls dynamic phenomena of the first genus, and the dynamic phenomena of these passages being what he usually calls dynamic phenomena of the second genus. Thus he merges a large part of the static phenomena into the first genus of dynamic phenomena. This wide, inclusive concept of dynamic phenomena is made to embrace everything of influence upon values and prices, both those phenomena which do and those which do not conduce to a return to a position of equilibrium. Thus nothing is left in the category of static phenomena except the state of equilibrium itself, all movement having ceased.

We may therefore ask: has not Professor Pantaleoni shown the bias so common to authors urging attention to a somewhat neglected subject? Does he not so define the concept of dynamic phenomena as to beg the question of their overwhelming importance in economics? They are the whole thing, both in price-fixing and in price changes, with which economic study is concerned. "A static situation" exists only when there is complete equilibrium of prices. Dynamic phenomena include every act of the market, all transformations which last until they have caused positions of equilibrium, all bids and choices, all apportioning of personal income to different consumptive purposes, all transactions on the stock market, all

acts of production, and all changes of saving into the means of production.

### II. *The Distinction Between Economic Statics and Economic Dynamics.*

Professor Pantaleoni's paper is called, Some Phenomena of Economic Dynamics. It is an easy and permissible transition of thought from the phenomena to the branches of economic study corresponding with the classification of the phenomena. In the brief references he makes to this subject, Professor Pantaleoni thus defines them: "Economic statics will be, then, the study of positions of equilibrium. Economic dynamics will be instead the study of the movements manifested in positions of disequilibrium which conduce toward a return to positions of equilibrium."

Does this not leave the concept of economic statics an all but empty one, and the distinction between it and economic dynamics all but vain? Economic statics is to be taken as the study of positions of equilibrium, but the things the economist is interested in, the forces, the motives establishing or restoring equilibrium, are to belong all to dynamic economics.

### III. *The Distinction Between Static and Dynamic Societies.*

The preceding distinctions do not coincide with that between static and dynamic societies (and correspondingly that between static and dynamic economics) as made familiar to American economists through the writings of Professor John B. Clark. Dynamic societies, as we understand the term, are those in which Professor Pantaleoni's dynamic phenomena of the second genus and those of the second species of the first genus are appearing. But the first species of dynamic phenomena

(those working to restore the usual or normal equilibrium) must be found in the most stationary possible type of society. In the most changeless society, there must be, among the individuals composing it, motion, action, life, adjustment, and effort toward equilibrium; and the equilibrium must constantly be disturbed by seasonal changes, variations in crops, chance destruction by the elements, and fluctuations in personal qualities of men. As Professor Clark has just shown, the term static, when applied to economics, is suggestive of an imperfect analogy.

Phenomena of motion almost alone concern the economist, but shall we therefore call all economics dynamic? The term thus would lose most of its significance. The contrast of most fundamental importance is that between stationary and progressive social organizations. It is this that Professor Clark has in mind. His dynamic society is not synonomous with Professor Patten's society of dynamic men; dynamic men may or may not be among the dynamic elements that at any moment go to make up Professor Clark's idea of a dynamic society, in which there may be at least four other elements.

The concept of the economic equilibrium can not be made the distinguishing peculiarity of a static society as seems to be implied by Professor Pantaleoni. It must be thought of as present in all dynamic societies as well. Any price, no matter how temporary and unstable, is one that for the moment brings into equilibrium the quantities bought and sold, produced and wanted at that price. Three main types of equilibrium have to be distinguished:

1. The present market price, the equilibrium of buyers and sellers at the moment.

2. The abstractly conceivable normal market price, within a brief period, around which actual prices fluctuate

in becoming adjusted to the underlying conditions of the period.

3. The price level at successive periods in long-period changes in the whole economic situation.

All of these have to do with motion and with forces, but the first two constitute the problems of static economics, and the last constitutes the problem of dynamic economics, in the American sense, following Professor Clark.

### IV. *Pantaleoni's Conception of Free Competition and Its Relation to a Static Society.*

In a workable conception of a static society, there must be individual activity, forces, and movements. Children are born, men grow old, they succeed or fail, advance or decline in individual fortune. The essential mark of a static society is fixity of general form and of social institutions, not crystallized human units. But the word static seems easily to suggest stagnation and absence of life. Is not even Professor Clark influenced by this idea when he pictures a static society as one where the entrepreneur's function is *nil*, where industry having been started runs of itself and profits become zero? Professor Pantaleoni seems to go still further with his thought. He first says that free competition is an essential condition of equilibrium, though this idea fits badly with his description of the stationary condition of societies in which caste dominates. He reiterates that free competition produces equilibrium and monoply must cause a lack of equilibrium. Thus competition comes in his thought to mean a static society and interference with it a dynamic society. Does he not reach the *reductio ad absurdum* when he concludes that free competition implies costless transportation and costless interchange of units of labor of different qualities, thus making monoply synono-

mous with scarcity and with all values, and competition synonomous with costlessness and the absence of value?

After reëxamining these definitions, can we believe that the field of dynamic economics is so greatly neglected as Professor Pantaleoni believes? American economists from the time of Carey have naturally thought of change and progress as normal, and have protested against the assumption of fixity in customs, in social institutions, in the land supply, in the labor force, and in the industrial processes. They are accustomed to adjusting their reasoning on the problems of price to accord with this thought of change. In this day of the world economy, dynamic influences are more general and far-reaching and are profoundly affecting the societies of Europe, and the thought of European economists. Viewed in this perspective, Professor Pantaleoni's treatment appears to American students to be certainly fertile, timely, and suggestive, but neither radical nor revolutionary in economic theory.

# OUTLINES OF A THEORY OF WAGES.

F. W. TAUSSIG

The discussion of the theory of wages in recent years has turned attention to a more and more careful examination of the relation of wages to the product of labor. Clearly there is a relation between wages on the one hand, and product or efficiency on the other. It is this relation, for example, which explains the great international variations of wages. If the return to labor is higher in the United States than in England or Germany, higher in these than in Italy or Russia, the differences are due mainly to the greater or less productiveness of labor in the several countries. But what is the precise nature of the connection?

Those familiar with the course of economic thought in the United States will recall how hopefully many of us listened to the doctrine set forth on this topic by the first President of our Associaition, the honored Francis Walker. Wages, he said, are determined by the residual product of labor. The other shares,—interest, rent, business profit,—are settled by independent causes; what remains after these shares are apportioned, goes to the laborers. But this doctrine, welcome though it was as a clear improvement over what was then current, could not stand the test of critical analysis. The independent determination of the other shares was not made out. It was not shown that interest and business profits were settled by causes different from those acting on wages. The residual theory served its purpose as a first onset, but soon proved ineffective, and dropped out of the line of combat.

Its place has been taken, in the recent development of economic theory in this country, by another formulation of the relation between product and wages. There is a *specific* product of labor, we are told, and it is this which determines wages. And similarly there is a *specific* product of capital, which in turn settles interest. This doctrine, as need not be stated in the present gathering, has been maintained in the brilliant writings of Professor Clark, and has been stated with special precision in those of Professor Carver. The terms in which it is put are sometimes varied; wages are said to be settled by the imputed product, or the marginal product, of labor. In one formulation or another, its vogue is no less than was that of Walker's doctrine twenty years ago. It makes its appearance in most of the text-books that are now in fashion. Yet I cannot but believe that it will share the fate of its predecessor. It will be remembered as a promising attempt to grapple with an intricate problem, a step forward in our slow and uncertain progress toward the truth; but it will not be accepted as a definitive advance.

The grounds for this doubt have been stated with admirable logic by Professor Böhm-Bawerk. They are closely connected with the analysis of capital and its functions by that acute thinker. The reasoning of Professor Clark assumes a separate productivity of capital and of labor. That productivity it is attempted to illustrate and to prove by supposing the addition of successive doses of labor and of capital, and by analyzing the consequences which will follow as these increments are added. The reasoning is familiar to you. Throughout, under static conditions, there is supposed to be a tendency to an increase in the return, but a diminishing increase; a tendency to a lessening marginal increase, and thus to a determination of wages and interest by the marginal increase of output.

Elsewhere I have expressed my doubts as to this universality of the law of diminishing returns.[1] That principle, as one of universal application, deserves still further the attention of the economists, and seems likely to receive it. But the irregularity or uncertainty which I suspect to inhere in it, and to stand in the way of its wide-reaching and unfailing application, is not of importance for the purposes of the present discussion. Whether certain or uncertain, this principle of diminishing returns and marginal increase can give a clue to the determination of only *one* of the two items to which it is applied. It may point to the cause which determines interest. I believe it does so; interest is determined proximately by the increase of product resulting from the last or marginal application of capital. But it does not also point to the cause determining wages. In the application of the principle to both wages and capital, and in the attempt to reach an independent law for each, there is reasoning in a circle.

The ground for this statement is, briefly, that capital is not an independent factor in production. Capital simply means a different way of applying labor. When we say that more capital is added to a given amount of labor, we use a short-cut expression. That given amount of capital did not drop from heaven, or come into existence in any other way than by the application of labor. Professor Böhm-Bawerk has rightly insisted on this fundamental fact. It is expressed pithily by Professor Marshall when he says that "the substitution of capital for labor is really the substitution of labor, combined with much waiting, in the place of other forms of labor combined with little waiting."[2] Capital means, at the outset, surplus or sav-

[1] See *Quarterly Journal of Economics,* May, 1908. *Cf.* also Professor Landry's article in the same *Journal,* for August, 1909.

[2] *Principles of Economics,* Book VI, ch. I, p. 593. (4th edition.)

ings, enabling us to extend the time-saving method of production. If there be an additional surplus, more labor can be applied to the preparatory steps, and more capital ("capital goods") will be *made.* Very likely there will then be an eventual increase in the output of consumable goods and an eventual increase of satisfactions or utilities. But the making of the capital is only a way of applying labor to making the consumable goods. According as one way or another way is followed—simple or elaborate—much or little waiting is entailed. According as one or the other is used, more or less of consumable goods may be expected in the end. But there is no separate product of capital. There are conditions as to the eventual outcome which determine how much can be got in the way of excess or premium or interest (all these terms point to the same thing) by those who at the outset possess the surplus means, who do the waiting, and who become the eventual owners of the output. In other words, the net earnings of the capitalists are determined by this process. But there is no separate product of the capital. Nor is there any separate product of the labor. There is one product, all produced by labor, and indistinguishable as to its source. Some part of the enlarged product the capitalists can retain for themselves. The laborers get less than their labor as a whole has produced. Having this means of explaining how much the capitalists will *receive,* we may be tempted to say that we know what their capital has produced. Being able to say that the amount which the laborers produce is lessened by

There are other passages in Professor Marshall's book which possibly could be interpreted otherwise. Sundry illustrations are used to show that there is a "net product" of any instrument; yet he observes that "illustrations of this kind merely indicate part of the action of the great causes which govern value. They cannot be made into a theory of interest, any more than into a theory of wages, without reasoning in a circle" (p. 589).

what the capitalists receive, we are tempted to say that the laborers *produce* only that lessened amount. But in fact there is no separate product of either.

One remark let me interpose. If there be a factor in production separate from labor, it is not capital, but "abstinence" or "waiting" or "preference for present goods" or "time preference." All these phrases (which I give in their historical order)[3] refer to the same thing—that unwelcome sacrifice which the postponement of present enjoyment is supposed to entail. I will not enter at this stage on the thorny questions which the notion raises—whether there is really a sacrifice in "saving", whether there be a rate of interest determined in the end by that sacrifice, whether any explanation or justification of interest can be deduced in this way. I wish simply to point out that here, if anywhere, is the factor related to interest in the way in which labor is related to wages. Here is the factor which might conceivably be said to be productive in the way in which labor is productive. Both are acts of human volition done in ways which add to the sum of utilities.

None the less, it seems to me not a happy use of terms to call waiting or abstinence productive. What the socialists say of the sterility of mere abstinence is well put. We can maintain, it is true, that unless there be waiting by somebody—either by the laborer himself or by some one who does the waiting for him—labor cannot be applied in the more productive ways; and the fact that waiting thus enables the more productive ways to be followed, is one element in explaining why those who do the waiting secure a return in the way of interest. But the waiting

[3] "Abstinence" is Senior's phrase, adopted by the so-called classical writers. "Waiting" is Macvane's, accepted by Marshall. "Preference for present goods" is Böhm-Bawerk's. "Time-preference" is Irving Fisher's.

can hardly be said to *produce* anything; it simply enables labor to produce more.

At all events—to return to the main thread of the reasoning—it can not be said that capital produces anything, still less that there is a separate or specific product of capital. Capital represents only a step in the elaborated processes by which labor of all kinds carries on the operations of production and finally brings forth utilities. Professor Carver, who has formulated the doctrine even more sharply than Professor Clark, remarks that the question whether capital is productive can be easily answered: surely tools are useful.[4] But the question seems to me not quite solved in this way. Is not the labor which made the tools "useful"? And is there a productiveness of the tools *separate* from the productiveness of the labor that made them? Labor is more useful—yields more utilities—if applied first to making tools, and then to using them; but is there a specific product of the tools?

If there is no specific product of the tools or of capital, there is none of labor as distinct from capital. There are differences in the productiveness of labor according as it is applied in different ways—by first making tools or without stopping to make tools, with more tools or with less tools. But there is no product of the labor distinct from the product of the tools. To repeat, the whole product is due to labor; or, if there is to be any modification of the proposition, the whole product is due to labor and waiting. We may be able, by a principle of "imputed" productivity, to make out what determines the *reward* of the laborers and of the capitalists owning the tools. But in sober fact, in concrete reality, we cannot make out any separable product of either.

[4] See Carver's *Distribution of Wealth*, p. 216.

Let me now present another mode of stating the relation between wages and product. It can make no pretensions to novelty; but it may bring together familiar ideas in a more consistent way. The formula which I should be disposed to frame is this: wages are determined, under competitive conditions, by the *discounted marginal product* of labor. I invite your attention to the two elements in this formula; "marginal" and "discounted."

What is meant by *marginal* product will be obvious enough. It is indicated by the old-fashioned conception of agricultural rent. Wages and interest are determined, in that conception, at the margin of cultivation. Any excess secured on land better than the marginal land goes to the landowner, and does not affect the returns of other persons. The same principle is applicable to monopoly gains, and to all differential gains. The laborer, and for that matter the investor, who deals with the owner of good land or with a monopolist, must accept what can be paid by the marginal landowner or the competitive producer. Any extra or differential returns go to the fortunate owners of those instruments which have been sheltered by nature or by social institutions against unfettered competition.

Two remarks may be added as to the significance of the marginal element in the formula. The first is that a broad competitive margin is assumed to exist, at least as to capital: one sufficiently extended to have a real and effective influence. If there be no normal or competitive returns to capital; if there be a universal régime of monopolies or combinations; or if it be but an accident whether a given kind of instrument yields large or small returns to its owners—then we can lay down no law of wages, and but a precarious one as to interest. To this point I shall return at a later stage in the argument.

The second remark is that we must not be misled by convenient phrases as to the superior productiveness of land or of monopoly instruments, still less misled by phrases as to their having a specific or separate product. Those who maintain that there is a specific product of capital maintain also that there is a specific product of land, and that rent (in the old-fashioned sense) is this specific product of the land. Many of the older economists, who did not dream of the modern applications and connotations of such phrases, also spoke of rent as the product of the land. But the same thing may be said of natural agents as of instruments made by man: throughout, labor is the essential agent in production, and neither land nor capital produces anything. I have just stated that labor applied in some ways (through the previous making of tools) produces more than labor applied in other ways. Similarly, labor applied on some lands produces more than labor applied on other lands: hence arises the differential return which we call "economic rent." Labor applied in connection with monopolized instruments produces more (in terms of value) than labor applied with competitive instruments: hence the differential return which we call "monopoly profits." There is no separate product of the land or of the monopolized tools. There are simply differences in the product of labor according as it is applied under different conditions. These differences in product explain how economic rent and monopoly profits arise. Here, as with regard to competitive instruments, or "capital" in the ordinary sense, we deceive ourselves by imputing as "product" that which is really the income (earnings, if you please) of the owners of certain instruments of production.[5]

[5] The reader will perceive that on this topic my point of view seems to be different from that of Böhm-Bawerk, who maintains

Let us turn now to the other element in the formula: the *discounted* product of labor.

Discount implies an advance. No explanation of wages is adequate which does not recognize the fact of an advance. On this topic I must again differ with my friend Professor Clark, who has denied that there is anything in the nature of an advance.[6]

The situation seems to me so simple that I find it difficult to adduce any proof. Mere statement of the obvious facts suffices. Industry takes time: the process of production is a prolonged one. Wealth is unequally distributed, and the immense majority of the laborers have not the wherewithal to support themselves during the prolonged period. Hence their remuneration is advanced to them out of a surplus possessed by some one else, and the capitalist class secures its gain or profit by advancing to the laborers less than they eventually produce.

This view underlay the old wages fund doctrine: a doctrine always inadequate and often sadly misapplied, but having its core of truth. The great theoretical defect of the wages fund doctrine, as it used to be stated, was

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that labor and natural forces stand side by side as the fundamental agents of production. The difference, I believe, is one of phrase only. It signifies little whether we say that labor *at the margin* works side by side with natural forces, or say that it simply guides those natural forces and is itself the one essential agent in production. What I wish to insist on is that, *above the margin,* the natural forces are in no peculiar sense specific contributors to production.

The doctrine that labor is the one essential agent in production is, of course, very different from the doctrine that labor is entitled to the whole product. I have always believed that the socialists used tenable language in saying that labor produces all. But the question whether labor therefore should receive all, is quite different. It is not to be settled by semi-metaphysical reasoning, but by broad inquiry as to the evolution of human society, the motives to industry, the perfectibility of man.

[6] I refer again to my paper in the *Quarterly Journal of Economics,* May, 1908.

that it attended only to a small segment of the industrial process. It assumed that the advance to laborers was needed only until a *saleable* product was achieved. That stage once reached, no futher advance was supposed to be required. But modern analysis has made clear the prolongation and the unity of the whole process of production. Not through one stage only — not merely until the individual employer can pay money wages to his workmen — but through all the stages, from the first gathering of materials and the first fashioning of tools to the last steps in transportation and exchange, advances to the workmen as a whole are made by the capitalists as a whole.

Modern anaylsis has done more. It has shown how the theory of wages is related to the general theory of value. The analysis by the leaders of the Austrian School of the higher and lower ranks of goods; the conception of the derived value of instruments and materials; the exchange between present goods and future goods, which Böhm-Bawerk has made a permanent part of economic theory; the principle, so skilfully developed by Professors Fetter and Fisher, that the present value of any form of wealth is an anticipation and capitalization of the utilities yielded,—all this points to the mode in which labor is related to its ultimate product. That product is *discounted.* The laborers get wages determined by the utilities ultimately yielded by their labor, but diminished by the discount due to its emergence in the future.

This discount we may assume provisionally to take place at the current rate of interest. Evidently the simpler the processes, and the more predictable their outcome; the more effective, too, the competition among capitalists,— the closer will be the correspondence between future product and present wages. The discount then will be easy to

calculate. Where the process is complicated, long stretched-out, and uncertain as to its outcome, the relation between wages and product is a very loose one. Such an operation as the construction of the Panama Canal illustrates the maximum of uncertainty in the relation between product and wages. It will take years to build the Canal; it will take further years before its effect on the ocean routes and on the cost of transportation are worked out; and still further years before these changes affect the international division of labor and the ultimate increase of product due to increased geographical specialization. Meanwhile those engaged on work at the Canal do not receive the speculative discounted value of the product of their own work. They receive the current discounted value of labor in those routine industries where experience has indicated what the output will be. What is true of the Panama Canal is true, in less degree, of all new and venturesome operations. In such operations the business man — the entrepreneur — exercises his most characteristic functions, and, if successful, procures his highest returns. He not only discounts, he speculates; and he pays to his laborers the rate of wages fixed in those operations in which the discount is comparatively simple and calculable.

Thus we reach once again the proposition to which, a moment ago, I promised to return; that, if we are to have a working theory of wages, a competitive margin must be supposed, at which capital secures a normal return and at which the process of discounting is carried out with some approach to accuracy. And this effectiveness of competition must appear not merely with reference to floating means or surpluses seeking investments,—"moneyed capital." It must appear as to the real apparatus of production, as to factories, mills, railways, shops. Recent

writers on capital have justly pointed out that we are apt to deceive ourselves, both as to wages and as to interest, by thinking of moneyed capital only, of the payments of interest on money loans and the payments of wages in money. How is it as to the factories and mills? Is competition among them, or at least through a broad tier of them, so effective that their capitalist owners secure but a normal return, and their laborers secure the discounted value of the product due to their labor,—to the labor of *all* those who have worked at the intricate series of successive steps?

Whether there be such a competitive margin, broad enough to settle the general range of wages, is a question of fact, and one by no means easy to answer. On the one hand we are confronted with the portentous growth of large-scale production, and the development of industries which seem to set at nought all our theorizing about a normal course of investment. In this regard, monopolistic combinations seem to defy economic law as well as statute law. On the other hand, we hear that in many directions business has become a matter of cents, and that the slightest margin to the good or to the bad makes the difference between financial success and financial failure. While in iron and steel making we see industry on a vast scale, with competition disappearing, and profits either abnormally large or quite vanishing, cotton manufacturing and shoe manufacturing are still businesses with a normally narrow margin of profit.

My impression is that on the whole the competitive margin still exists, and that there is such a thing as a normal return in the capital market and therefore in the general labor market. Doubtless there is more irregularity and uncertainty than under simpler conditions of industry. Yet a sufficient approach to a leveled result

exists to warrant us in speaking of normal interest and normal wages. There is probably a lessening *range* of competition. The competitive region, though still broad enough to give a *ποῦ στῶ*, is far from being coextensive with industry. Economic rent and monopoly profits (it is not material to the present discussion whether these be regarded as two different sorts of return or as essentially similar) play a larger part than in previous generations. There is a wider divergence between wages and the *total* discountable product of labor, even though still an approximation of wages to the *marginal* discounted product. The concentration of wealth and the inequality of ownership are growing greater, and give rise to the gravest social problems. But these divergences affect our theory only in causing emphasis to be laid on the word "marginal" in its formulation.

At all events, if there be no competitive margin for capital, and no normal and governing rate of discount for the product of labor, I see my way to no theory of wages, or at least to no theory that points to any determination of wages. If the return to all capital be simply a "rent" depending on the derived utility of the instrument, and subject to no leveling influence from the conditions of supply and competition, then as between laborers and capital owners the whole relation is simply that of a game of grab. Each side tries to get as much as possible, and there is no telling what will be the outcome. In some of the older German text-books on economics there is a statement of the theory of wages of this sort: wages cannot fall below a minimum determined by the bare limits of subsistence; and they cannot rise above a maximum determined by what the product enables the employer to pay. Between these two limits wages are said to fluctuate, "according to supply and demand."

The formulation always seemed to me a highly unsatisfactory one. The range between the minimum and maximum may be a very wide one, and there is nothing to indicate where, within those limits, the actual rate will fall. This same difficulty is presented, if we assume the return on capital to be subject to no normal or marginal regulation. If it be all a matter of monopoly or non-competitive return, then the laborers may secure more or less in the way of wages according as they fight more or less vigorously for their share. The better they are organized, the more they have aid from legal enactment, the more they use or threaten physical violence, the more they will succeed in getting. Conversely, the better the capitalists are organized, and the more they have at their command the law, or physical coercion, or the threat of starvation, the more will they in their turn succeed in getting. Perhaps we are in a fool's paradise in supposing there is anything normal or regular in the return to capital owners; their doings may be after all, as the socialists say, only a process of wringing as much as possible from the poor and oppressed. This is a pessimist view, but one that seems to me to follow naturally from the negation of a regulating competitive margin.

Suppose now that it be granted there *is* a regulating margin; what determines there the rate of discount on the product of labor? It has been assumed in the preceding to be a discount at the current rate of interest. What settles that current rate of interest?

Here we must be on our guard against another danger of reasoning in a circle. Interest has been spoken of, in the opening paragraphs of this paper, as determined not indeed by any specific or marginal productivity of capital, but by the difference in the output of labor due to

labor's being applied in the more productive ways. In the language which Böhm-Bawerk has taught us to use, interest depends on the "technical superiority" of present goods; that is, on the possibility, because of the possessions of a present surplus, of applying labor in more elaborate and effective ways. So far I go with that penetrating thinker. But if we go only so far and no farther, we get no determination of wages. In this view (of technical superiority as the determinant of interest) we virtually assume wages. Substantially it says that interest depends on the excess of product over wages,—the difference between the goods turned over to the laborers in the present and the ultimate future product of their labor. If interest is determined by this process, wages also are determined by it. The one depends on the other, and neither is separately determined. The rate of discount, on this reasoning, *results* from the process of advances to laborers; it does not regulate or determine the amount of those advances.

The only escape from this difficulty is to be found in some independent regulator or determinant of the rate of discount. The essential defect of Böhm-Bawerk's analysis has always seemed to me to be that he ignores the possible existence of such a regulator; or, to be more careful in statement, that he ignores the possible regulating effect of certain factors. The older economists spoke of an effective desire of accumulation, of a minimum necessary to induce saving. Our modern phraseology is that of a preference for present over future goods, or (in Professor Fisher's phrase) a general "time-preference." If there is such general preference, or if there is a *marginal* preference, and a marginal rate of return necessary in order to induce the postponement of gratification to the future,—then and then only have

we an independent determination of interest, and so a tenable theory of wages as the result of an operation of discount.

I am aware that economists differ on this subject, and certainly are much more chary than they were a generation ago of assuming any fundamental supply price. The question is one of fact. On this question there is a chain of historical evidence to which, in my judgment, sufficient attention has not been paid. That evidence appears in the comparative steadiness of the rate of interest through the period of modern industry and investment. The industrial era in which we live is a couple of hundred years old. During these two centuries (more or less) the rate of interest has undergone no fundamental change. In the middle of the eighteenth century England and Holland could borrow at 3 and even 2 per cent. Since that time the rate has gone up and down, with the fluctuating demands for war expenditures and for industrial investment. Yet it has returned sooner or later to something like the level of 3 per cent, perhaps 4 per cent. Meanwhile, the *amount* of capital, measured in terms of surplus seeking investment, has undergone extraordinary fluctuations. The demand for capital (in the sense of demand for present money means) has undergone no less extraordinary fluctuations. The amount invested, the industrial possibilities of advances to laborers, the waste of present means in wars and armaments,—all these have varied enormously. Is it not a striking fact that, as the outcome of all the great changes in the conditions both of demand and supply, the rate of interest itself has changed surprisingly little? and does this not indicate *prima facie* that there is some regulating force which keeps it at a fairly constant level? No one would say that this level is absolutely

constant, or that it is determined with anything more than a rough approximation. The minimum — if there be one — perhaps is tending to decline; though, as the eighteenth century figures indicate, it does not appear that a lower range has been reached in our time than was familiar a century or two ago. Something like 3 per cent is the lowest rate which has been maintained, under modern capitalistic conditions, for any considerable period. It is possible, of course, that the failure of any lower rate to persist may indicate only that the incessant advance of the arts has kept up the "technical superiority" of present goods, and has caused the demand for the means of investment to outstrip steadily even the wonderful increase in supply. But may it not also indicate that something like a position of equilibrium has been maintained, and that there *is* an independent force regulating the rate of interest and so the terms of discount for labor's product at the competitive margin?

Let us now summarize this theory of a *discounted marginal product*. It assumes the spread of production over time; it assumes inequality in the ownership of wealth, and advances by the fortunate (sometimes deserving?) capitalist owners to the less fortunate laborers; it assumes in those advances a process of discounting by which the laborers receive less than they ultimately produce; it assumes a competitive margin, at which a current rate of discount is in force; it assumes that what laborers get at the competitive margin determines the rate of wages for *all* laborers; and finally it assumes that the rate of interest or discount is determined not as the result of the process of advances to laborers, but by a cause independent of that process.

It may be said that this is after all only another mode

of stating what was meant by those who maintain the theory that wages are determined by the specific or imputed product of labor and that interest is determined by the specific or imputed product of capital. Perhaps so. I would not dispute on matters of phraseology. I shall be glad if my conclusion is found to be in substantial accord with that reached by others who have grappled with this, the most difficult and fundamental problem of economics. The phraseology here submitted seems to me not only more accurate, but preferable on the ground that it purports to do no more than coldly analyze the facts of the modern world. The statement that labor gets the specific product of labor leads easily to an implication that this is all that labor *ought* to get. Even if it were proved that labor gets in any real sense its specific product, or that capital gets in turn its own specific product, the implied conclusion does not seem to me necessarily to follow. Whether it is right that every man should get what he himself produces, raises deep-reaching questions as to justice. Should the strong retain what their strength enables them to produce, or is it equitable that they should share with the weak? The essential ground on which distribution according to works can be defended, is utilitarian. The strong, it may be said, would not put forth their strength in full unless they expected to keep the resulting product for themselves. But these high topics need not be considered here. The first business of the economist, though by no means the only business, is to analyze the facts, and to present as simply as he can, without implication or apology, the results of his analysis. And from this point of view, I submit, it is more accurate and helpful to speak of the discounted marginal product of labor, than of the specific or imputed product of labor.

One other topic, and I conclude. If there be a normal rate of interest determined by time-preference, a sort of supply price of capital;—is there perhaps also a supply price of labor, a normal rate of wages determined by the laborer's standard of living? The discounted·marginal product of labor may be said to indicate only the demand price of labor. The long run or equilibrium price may be said to be settled by a supply price, based on the standard of living. We know that this was the Ricardian and Malthusian view. In that older view, the rate of wages was determined temporarily by the relation between the wages fund and the supply of laborers, that is, by demand and supply; but was determined permanently by the habits and standards of the laborers, or by something analogous to cost of production. The doctrine of a standard of living as determining wages still bulks in our modern treatises. What validity may it have?

On one point we shall all agree. The standard of living does not affect wages directly. It acts on wages only by its effect on numbers. All the standard of living in the world will not make wages high if laborers are many and if their product (their marginal discounted product) is small. People often talk loosely on this topic, as if a high standard of living were *per se* efficacious in making wages large. In this company it need not be argued that it affects wages only by its influence on the marriage rate, the birth rate, the supply of labor over generations. Looking at the long-run course of the movement of population, do we see evidence of a basic rate of wages determined by the standard of living?

It seems to me very doubtful whether we can answer this question in the affirmative. The history of wages during the modern period indicates no such tendency to a normal rate as is suggested by the history of the rate of

interest. We find indeed sometimes a clinging to an habitual standard, indicated by stationary birth rates and marriage rates. Too often, alas, we find a rate of wages nearest the bare minimum, and indicating a willingness to multiply so long as the barest means of supporting life are earned. But, surveying the modern era of the last century, we find, on the whole, in all the civilized countries, a slow but steady rise in the rate of wages, and with it a slow decline in the birth rate. As to interest, we find a steady rate, with perhaps a tendency to decline. As to wages, we find no steady rate, but in recent times a clear tendency to rise. If there be a standard of living, it is a shifting standard, and one that influences the supply of labor not in such a way as to keep wages at a given level, but such as to enable a steady advance in wages to be maintained.

There is a familiar passage in J. S. Mill's Political Economy, in which it is said that no improvement in the condition of laborers which is gradual will avail for their ultimate betterment. The advance in numbers will overtake any gradual improvement, and nullify the gain. Only a great and rapid uplift, such as the French Revolution brought for the peasantry of France, was expected by him to affect the standard of living and the permanent rate of wages. Happily the experience of the last half century in civilized countries has shown that this prediction is not justified. A slow and gradual rise in wages has taken place, and has not been nullified by an increased birth rate. Population has indeed advanced, and numbers have increased; but in consequence chiefly of a declining death rate. The standard of living slowly rises, but as a consequence of higher wages rather than as a cause acting to bring about higher wages. We need not, therefore, go far back of our formula, in analyzing the

causes that act on the general rate of wages. If, indeed, the procreative instinct is followed without check, and multiplication takes place as blindly with men as it does with animals, we may be sure that wages will always be at the bare minimum and the struggle for existence relentless. But this situation the civilized peoples have left behind them. For them, the general rate of wages,—that is, the material welfare of the great mass of mankind,—depends not only at any given stage, but over periods as long as it is possible for us to observe, on those conditions of demand which I have attempted to analyze in this formula,—the discounted marginal product of labor.

# OUTLINES OF A THEORY OF WAGES—DISCUSSION.

G. R. WICKER: Quot homines; tot sententiæ! That slightly worn phrase might well be adopted as the modest motto,—a sort of *pretext*—for every contribution to economic theory. So vast and so confusing is the present array of divergent, and often contradictory theories, that I need offer no apologies if I fail to understand them. Indeed, this very contrariety is strong evidence that our theorists do not understand one another, and they cannot therefore blame us outsiders if we, in turn, fail to understand them. If in my brief discussion of the paper before us this morning I fail to understand Professor Taussig's position, he will, I am sure, exonerate me from wilful misunderstanding.

In order to bring my remarks well within my time limit I have chosen to select a few salient points and to attempt very briefly to establish them.

First, accepting for the moment Professor Taussig's claim that capital is not a productive factor, but only labor in its indirect application, I challenge the conclusion drawn from this view. Professor Taussig tells us that wages is the discounted marginal product of labor; but the margin is not that of Professor Clark. It is the provisionally accepted competitive margin at which capital receives the current rate of return. To Professor Taussig, then, labor elsewhere applied, including labor applied directly, that is, without capital, has its wages fixed by the wages of labor at the competitive margin. The social time-preference then becomes the real regulator of wages throughout the labor field.

I offer the following brief statement as a more reasonable view of the situation, if we are to treat capital as an indirect mode of labor; labor may be and is applied, both directly and indirectly, that is, without and with capital. In either case, its specific product tends to diminish after reaching a point of maximum efficiency of coöperation. Labor tends to distribute itself in the two channels in such a way as to equalize the wages in the two modes. This being the case, it might be said without great theoretical impropriety that the marginal product of labor in its direct mode fixes the wages of labor in its indirect mode. If the labor indirectly applied produces more than the wages of the direct mode, the surplus or difference measures what Professor Taussig calls the discount,—or interest. As between the claim that the discount fixes the wage and the claim that the marginally produced wage fixes the discount, I believe that the second is to be preferred.

But I do not believe that either is an accurate mode of presentation, or that either marginal productivity or time-preference can be regarded as the sole regulator. Rather they must be regarded as interdependent variables. Society, by its time-preferences, gives the relative social valuation of goods directly and indirectly produced. On the basis of these relative valuations, labor flows into the two streams as I have indicated. The marginal productivity of labor directly applied is therefore a resultant of two forces, social time-preference and natural resources. Likewise in the other channel, labor meets with resistance from the social time-preference in such a way as to retard its flow. The amount that labor will receive is then the amount that it can produce by the direct mode,—which equals the amount that must be imputed to labor in its indirect mode. The difference between the "product", in Professor Taussig's use of that term,

and the "imputed product" of Professor Clark's exposition, is interest, the measure of the social time-preference.

I wish also to pick a quarrel with Professor Taussig in his reference to a theory of wages, found, as he puts it, "in some of the earlier German text books." Now that theory, as I understand it, is no more than a bargain theory of wages. In the form in which I still feel justified in giving it to my own students, as the last word in theory, it runs about as follows: There is a lowest limit to wages fixed by the cost of subsistence of the workmen. Above this lowest limit is a more flexible lower limit, set by the long-time influence of the standard of living. There is also an upper limit set by the productivity of labor. I believe that the meaning of this upper limit can be understood most plainly by Professor Clark's marginal analysis. If competition were everywhere perfect, if workmen were economists in procreation, these two limits would coincide at a point of maximum advantage for all the factors of production, *given the other elements of our economic system as they might then stand.* But competition is not perfect, and the other assumptions are also in great measure unreal. Hence there is between the normal lower limit and the normal upper limit a gap, varying in width with time and circumstance, in which law and trade-union, boycott and strike, bribery and bludgeon do their work of fixing the actual wage. And I cannot see how we get far from this position, though we accept Professor Taussig's "competitive margin, broad enough to settle the general range of wages."

But, finally, I should like to protest against the multiplication of theories designed to avoid unwelcome social philosophies based upon the old. It is the business of pure economics, of economic theory, to explain, not to justify or condemn. I grant that the only ultimate purpose of

theory is to afford a basis for weighing, and hence for accepting or rejecting, economic systems. But it should not be in the mind of the theorist to find a basis of justification or condemnation of any particular economic system. That is where, as it seems to me, Professor Clark has been in very high degree blameworthy. He has given us an excellent mode of viewing and explaining the actual working of some of the deeper economic forces in our society. He has not thereby justified those forces or that society; yet he deliberately claims to have done so.

Paradoxical as it may sound, Professor Clark's Distribution of Wealth equally well supports a theory of revolution. In his introductory chapter, he tells us that should it appear that the workman receives less than he produces, many workmen will become revolutionists, and all ought to do so. In the book that follows, there is a demonstration that in our actual dynamic society, profits must come from the product of labor and capital; and obviously more must come from wages than from interest, by reason of the greater ignorance and inertia of the working classes. Hence, in Professor Clark's opinion, all workmen should be revolutionists, at least in order to introduce the golden static age.

But, seriously, Professor Clark's claim to have justified the existing order is equally illogical. To have proved that the capitalist gets in interest what his capital produces is not to have proved that the capitalist gets what he has earned. To have proved that the landlord gets what his land produces is not to have proved that the landlord earns his distributive share. This can hardly require amplification.

But further still. To have proved that labor gets all that labor produces is not to have proved that labor has no ground of complaint. It is, at least, conceivable that

the workman has a just grievance against a social system which lowers his productive power or forces it into unwelcome channels. Professor Clark's analysis shows why the prostitute or pugilist may receive more in our society than does the priest, but he would hardly claim that he has thereby justified the economic system, of which prostitution and pugilism are natural economic institutions. The marginal productivity of prostitute or pugilist, as of other work people, is due, not to Professor Clark's analysis, but to the economic system of which, perhaps, they are a fitting expression.

I ask then that economists shall spend more time in ridding old theories of their illogical and unbased corollaries, and less time in trying to replace or reshape those theories because they have been associated with unwelcome philosophies. Specifically, I believe that Professor Taussig would have rendered a greater service by giving his time and talent to warning economists and laymen against the improper application of Clark's very useful theory. Economics is not ethics; explanation is not justification.

L. C. Marshall: One whose interest does not lie primarily, or even largely, in theory is possibly rushing in on dangerous ground in discussing as abstract a bit of theory as this before us today. I take it, however, that our theories are framed not for the intellectual delight of the priests of the temple but rather for the guidance, in this confusing period of transition and readjustment in economics, of that great body called the public. From this point of view, the worker in so-called "applied economics" may properly speak.

A scholar skilled in exposition has placed before us in brief compass a theory of wages which raises most of the

fundamental problems of distribution. To comment upon all of the points he has raised is obviously impossible. Many of these points will be granted by all to be well taken; others, while questioned, must be granted to carry the author's usual suggestiveness; all have been presented most effectively. Covering so vast a subject in such a limited time, Professor Taussig has, of course, been forced to leave many things to be implied, and a reviewer may well have misapprehended his positions. If, however, the present reviewer has properly grasped the doctrine presented, it seems to him that it may well be questioned (1) whether this theory is not founded upon an assumption of more than doubtful validity; (2) whether, in final results, it makes any substantial advance over the theories it purports to reject; (3) whether, in its general tendencies, it may not serve still further to becloud issues and thus increase the discontent which practical men already have with economic theory.

1. This "discounted marginal productivity" theory of wages is built upon the assumption that all product is produced by labor alone. To quote, "the whole product is due to labor......labor is the essential agent in production and neither land nor capital produces anything ......I have always believed that the socialists used tenable language in saying that labor produces all."[1] Surely, this is a doubtful foundation upon which to erect a theory of wages. It need not be pointed out in this presence that such a doctrine has often been advanced and as constantly rejected, and, as I must think, wisely

[1] These quotations unmistakably give correctly Professor Taussig's view. His greatest concession is made in a foot-note where he has said: "The difference, I believe, is one of phrase only. It signifies little whether we say that *labor at the margin* works side by side with natural forces, or say that it simply guides those natural forces and is itself the one essential agent in production."

rejected. The position seems to me to be but a matter of assumption and definition. The same could be assumed in the case of land or of capital. Indeed, if a choice *must* be made, is not the case for natural agents, as the essential factor of production, stronger than it is for labor? Taking Professor Taussig's own causal scheme, could we not push it one step further back and contend that the doctrine of evolution has shown that natural forces have developed plant life, animal life, and finally man who developed tools. Therefore the only essential factor in production is these natural agents, or land. But at the best, does this not become a matter of pure speculation and must not our attitude be determined in such cases by the findings of practical life? As applied to the industrial world the query as to whether land or labor or capital is the essential instrument in production is but the old query as to which blade of a pair of shears does the cutting. Our business man uses the various productive agents with no thought as to how they came into existence. He cares only how much they add to his product (and so are productive as he sees it) compared with their cost. A capital good is not necessarily productive in proportion to the amount of labor expended in the making of it—not even in the long run, in this changing industry of ours. This alone, in a practical discussion, would justify capital's being treated as a separate factor of production. I fear that the position that labor is the only productive factor is not only of doubtful validity but is also apt to divorce economics from practical life. Also, it may lead one into dangerous social implications too ramifying and multitudinous to be here treated.

2. Leaving the question whether labor is the essential factor of production, does the theory of wages which we

are considering make any substantial advance over the theories it purports to reject? Apparently, this new theory assumes that the other shares are determined by independent causes. Rent seems to be the rent that Walker taught, profits are either omitted or are zero at the margin, and the rate of interest is determined by an "independent regulator", namely, "a marginal rate of return necessary in order to induce the postponement of gratification to the future"—"time preference." Wage is what *remains* after the capitalist has discounted the marginal product of labor, or, since labor produces all, wage is what *remains* after the capitalist has discounted the *total marginal product,* whatever that may mean. In other words, the laborer gets the total product less that which goes to the other shares, which other shares are determined by independent causes. Is this not, as regards its broad tendencies, substantially Walker's residual claimant theory with an interest theory more specifically defined and a profits theory omitted? True, a somewhat different route has been used, but have not both ways led to the same destination? Did President Walker or Professor Taussig use the following language? "Wages and interest are determined......at the margin of cultivation......Any excess secured on land better than the marginal land goes to the land-owner and does not affect the return of other persons......We have an independent determination of interest...... Capital secures a normal return." It is to be remembered that the paper under discussion contends that the return to capital has remained practically fixed through centuries; it implies that this return will continue to be stationary; it further contends that wages show no such tendency to be stationary; that supply price of labor is of secondary importance; that standard of living slowly rises "as a

consequence of higher wages rather than as a cause acting to bring about higher wages." Can all this mean anything else than that labor is the residual claimant? Can it properly be said, as the proposer of this new theory has said, that the residual theory has "dropped out of the line of combat"? Can this new theory hope to have its results judged by any standards different from those which were applied to the Walker theory? In arriving at its results has the new theory used methods superior to those of Walker?

When it comes to determining the relation of this new theory to the marginal productivity theory, I frankly confess I am in some doubt. A residual claimant theory seems to have been put into marginal productivity clothing. Professor Taussig's questioning of the marginal productivity theory seems to be mainly upon the ground that there is no *separate* productivity. Speaking in in *physical* terms, this may well be true. But it may well be doubted whether the most extreme of the productivity theorists ever meant to speak in other than economic or logical terms. It may well be doubted whether they would contend that they could step into a modern complex industry and work out *concretely* wages, interest, etc., as *separate, physical* products. It may be doubted whether they mean, in substance, anything more than our author means when he says that interest is "determined proximately by the increase of product resulting from the last or marginal application of capital." To say this and yet to say that capital is not productive are things I am unable to reconcile. To say that the marginal productivity theory cannot be accepted as a definitive advance and yet to say that perhaps this new formulation, to quote, "is after all only another mode of stating what was meant by those who maintain the theory that wages

are determined by the specific or imputed product of labor and that interest is determined by the specific or imputed product of capital," are again things I cannot reconcile. Can it be that all this is but a matter of definition and phraseology? Whether this new formulation really is to be considered "preferable on the ground that it purports to do no more than coldly analyze the facts of the modern world," as is contended, will depend upon one's estimate of the doctrine that labor produces all, which I cannot but think an unfortunate and unnecessary part of the theory.

To summarize as regards the relation of this new theory to the theories it would supplant, if I have fairly interpreted this new theory, it seems to be hoped that its proximate results will be considered substantially similar to those of the marginal productivity school; its ultimate results are unmistakably similar to those of Walker.

3. One final suggestion. In all our theories we must have in mind the guidance of this great public of which I spoke earlier. All of us must admit that the *old* "demand and supply" doctrine was inadequately expressed; that there was truth in the charge that a parrot trained to repeat that phrase had some claim to be considered a good economist. We must further admit that the keen analysis of the marginal productivity theorists has enabled us to understand the forces of demand and supply as our predecessors never did. Probably their new phraseology was necessary if we were to be enabled to grasp the new ideas. We have, however, paid a heavy price in causing the ordinary citizen, whom we cannot expect to master our terminology since we cannot master it ourselves, to look upon our discussions as doctrinaire and confusing. This price we need not have paid had this brilliant new analysis been more closely linked to

the old nomenclature of demand and supply, which had become accepted terms. It has been abundantly shown that these new doctrines, even with their new terminology, may be interpreted as merely an elucidation of the fundamental ideas underlying the old doctrine. And now I would ask: granted, merely for the sake of the argument, that we accept this new "discounted marginal productivity" theory of wages, should it not have been more closely linked to the old concepts of demand and supply in its form of presentation? This simpler method would seem to have the more justification since our industrial phenomena are becoming more and more complex and the plain people need guideposts as plain and simple as may be. Are we to confound confusion by more new terminology? Would the new wine really burst the old bottles? Is the new wine, after all, so new?

J. H. Hollander: Professor Taussig's "outline of a theory of wages" is a subtle amendment of the prevailing productivity theory. In lieu of specific imputed product, Professor Taussig proposes as a more accurate wage doctrine the formula that wages are determined under competitive conditions by the discounted marginal product of labor. The modification is exceedingly plausible. If wages are, as the imputation theorists suggest, the value equivalent of specific product as represented by marginal increment, this very equivalence necessarily implies a preference of finished over incomplete marginal goods. Whether the process of equivalence be effected as the older economists believed by an actual advance from out a pseudo-wage fund, or whether it be accomplished as the newer writers propose by mere interchange from out a fluid loan fund, in either event a measured advantage will attach to product over process. The

estimation of preference may be something different from the particular discount rate to which Professor Taussig inclines, namely, the current interest rate as determined by the quota of the product allotted to marginal abstinence or waiting, but for the present at least Professor Taussig's formula is entitled to attention and respect.

Into the entrancing dialectic, whose inviting vista thus stands revealed, I do not propose to enter. Even to one whose place is far below the salt, it offers something of the allurement of the higher metaphysics or the pure mathematics in their controversial aspects. None, moreover, is too humble to splinter a lance, where the accoutrement is some degree of mental concentration and normal reasoning power.

If check be put upon this impulse, it is because of the present speaker's profound conviction that such an intellectual exercise, tempting and stimulating though it be, does not represent economic inquiry; that neither a theory of wages, nor indeed any other economic principle, is to be arrived at by such procedure; and that this is attested both by the imperfection of method and by the barrenness of result which the marginal productivity theory of wages discloses.

First, as to method: I assume that political economy is not to be ranked with metaphysics or pure mathematics but with the social sciences proper, and that its scientific pursuit involves either deduction with verification or induction guided by tentative hypothesis—or some degree of both. This is not a specific scientific method but the method of all positive science. Speculation without full and convincing verification is a fundamentally defective logic, and it has been in this manner that the marginal productivity theory of wages has been formulated.

Second, as to result: The concept of a marginal increment discounted at a rate determined by the share of product allotted to marginal waiting, is a metaphysical abstraction twice removed from the phenomena which it undertakes to interpret. The marginal product of marginal labor is in itself a wide rift from the world of actual industrial relations. But further to refine this by a subtle psychological calculus whereby this marginal product becomes a wage payment, takes us far from all semblance to real things.

I do not refer, understand me, to the practical inapplicability of the formula as a theory of wages. A scientific doctrine may be, and not infrequently is, perfectly true and perfectly useless. My protest rests upon the unreality of the concepts. The marginal product of marginal labor is something of which wage contracting knows nothing, and the discounting of this product by a time preference scale carries us to still loftier altitudes of metaphysical abstraction.

It may be said that these are subconscious forces whose influence with respect to wage determination is real although neither visible nor tangible. But the same might be alleged of blood pressure or atmospheric moisture in relation to the rate of wages. Assumed forces maintain their validity in scientific inquiry only when checked and confirmed by positive phenomena.

In the foregoing, I have ventured to castigate a venial offense over unoffending shoulders, for attractive as is Professor Taussig's argument, I rejoice to find in his paper a certain uneasiness at the conclusion to which he is brought. He has created a Frankenstein, only to feel some uncertainty as to the utility of what he has fashioned. This is preëminently as it should be. To one who recognizes with Professor Taussig's hard-headed

sanity that the theory of wages—and I quote here—"purports to do no more than coldly analyze the facts of the modern world", and further,—quoting again—"the first business of the economist, though by no means the only business, is to analyze the facts and to present as simply as he can, without implication or apology, the results of his analysis,"—to one, I say whose feet rest so squarely on the earth, it is disturbing and cheerless to stand sponsor for a wage formula which, however satisfying as an exhibit of speculative processes, is defective both in the matter of scientific derivation and of practical verification.

This is not the place even to intimate a positive theory of wages, in amendment of that to which consideration has been given. I cannot however refrain from alluding to Professor Taussig's alertness as to the actual facts of wage relation in his discussion of the influence of the laborer's standard of living upon the normal rate of wages. It is along this line, the present writer believes, the path blazed by the studies of Adam Smith and more notably of Ricardo, that the scientific search for a theory of wages will lead.

It will be a striking instance of retributive justice, nor indeed without example in the history of science, if a later day investigator shall hereafter arise to proclaim of the Jevonian-Austrian school and of their essential disciples, in paraphrase of the verdict which the name-father registered upon the Ricardians: "It will be seen that those able but wrong-headed Austrians shunted the car of economic science on to a wrong line, a line, however, on which it was further urged towards confusion by their equally able and wrong-headed admirers."

## THE PROBLEMS OF COUNTRY LIFE.

ROUND TABLE DISCUSSION; SIR HORACE PLUNKETT, *Chairman.*

HORACE PLUNKETT: I shall base my plea for a more thorough and systematic study of rural problems upon the contention that for many decades we have been guilty, unconsciously no doubt, of having gravely neglected one side, and that surely an important side, of western civilization. I believe the present attitude of public opinion toward the old question of town and country is due to economic tendencies and social changes, the general character and effect of which I must briefly indicate.

Among western nations the progress of civilization has riveted men's thoughts upon the great centers of industry and commerce, where the most startling changes have taken place. The dweller in the modern city not unnaturally believes that the many and varied improvements recently effected in its conditions have fully counteracted the apprehended evils of concentration. He is confident that the rapid and cheap transit facilities which enable the industrial and commercial classes to live in ever-widening suburbs will realize the ideal of *rus in urbe.* What with improved sanitation and physical culture on the one hand, and the multiplication of movements for intellectual advancement and social betterment on the other, the townsman of the future is expected to unite the physical health and longevity of the Bœotian with the mental superiority of the Athenian.

This somewhat optimistic survey seems to me to neglect one important factor. It does not appear to have

been sufficiently considered how far the ethical and physical health of the modern city has been due to the constant influx of fresh blood from the country. At present the town makes an irresistible appeal to the spirit of enterprise, to the growing craving for excitement, to the desire to live where there is most life. The country is thus the reservoir from which the town draws its best citizenship. You cannot keep on indefinitely skimming the pan and have equally good milk left. In America the drain may continue a while longer without the inevitable consequences becoming plainly visible; but sooner or later, if the balance of trade in this human traffic be not adjusted, the raw material out of which urban society is made will be seriously deteriorated. When that time comes, the symptoms of national degeneracy will be properly charged against those who failed to foresee the evil and treat the cause.

The present attitude of the public mind on this question is no doubt due to the same economic causes which evolved the modern city and urbanized the thoughts and activities of progressive peoples. The industrial revolution which robbed the country of its manufactures, and the establishment of "the world market" by improved and cheapened transportation, have produced a radical change in the relationship between the two sections, rural and urban, into which every civilized people is divided. Within the last century every town relied largely on the produce of the fields around its walls. The countrymen coming into the weekly market were the principal customers for the wares of the town craftsmen. This simple exchange, as we all know, has developed into the complex commercial operations of modern times. Today most large towns derive their means of sustenance from the food-growing tracts of the whole world; and I doubt

whether any are necessarily dependent on the adjoining agricultural communities or feel themselves specially concerned for their welfare. And yet the reciprocity between the producers of food and raw material of clothes, on the one hand, and manufacturers and general traders of the towns, on the other, has not passed; it has actually increased since the days of steam and electricity. Town consumers are still dependent upon agricultural producers, who, in turn, are much larger consumers than formerly of all kinds of commodities made in towns. Forty-two per cent of materials used in manufacture in the United States are from the farm, which also contributes seventy per cent of the country's exports. I say, therefore, that the old mutual interest of town and country remains; but in the break-up of the personal connection which belonged to the local market the sense of the corresponding mutual obligation has been lost.

The process of readjustment has gone on rapidly in the cities, but slowly in the country. This is particularly true in the matter of business methods.

The superiority of the business methods of the town over those of the country is obvious, but I think it is not universally understood wherein that superiority lies. What strikes the eye is the material apparatus of business—the telephone, the typewriter, street cars, the advertisements, the exchange; all these form an impressive contrast with the slow, simple life of the farmer, who very likely scratches his accounts on a shingle or keeps them in his head. But most of this apparatus is due merely to the necessity of swift movement in the concentrated process of exchange and distribution. Such swiftness is neither necessary nor possible in the process of isolated production. But there is an economic law as applicable to rural as to urban pursuits, which has been recognized

and obeyed by the farmers of most European countries, including Ireland, but has been too little heeded by the farmers of the United States and Great Britian. Under modern economic conditions things must be done in a large way if they are to be done profitably, and this necessitates resort to combination.

The advantage which combination gives to the town over the country was recognized long before the recent economic changes forced men to combine. In the old towns of Europe all trades began as strict and exclusive corporations. In the eighteenth and nineteenth centuries new scientific and economic forces broke up these combinations, which were far too narrow for the growing volume of business to be done, and an epoch of competition began. The great towns of America opened their business career during this epoch, and have brought the arts of competition to a higher perfection than exists in Europe. But it has always been known that competition did not exclude combination against the consumer; and it is now beginning to be perceived that the fiercer the competition, the more surely does it lead in the end to such combination.

A trade combination has three principle objects: It aims first at improving what I may call the internal business methods of the trade itself, by eliminating the waste due to competition, by economizing staff, plant, etc., by the ready transmission of intelligence, and in other ways. In the second place, it aims at strengthening the trade against outside interests. These may be of some various kinds; but in the typical case we are considering, namely, the combination of great middlemen who control exchange and distribution, the outside interests are those of the producer on one side and the consumer on the other; and the trade combination, by its organized unity of action,

succeeds in lowering the prices it pays to the unorganized producer and in raising the prices it charges to the unorganized consumer. In the third place, the trade combination aims at political control. By various methods it tries to influence the course of legislation and administration so as to favor its own interests in their relation to other interests. I am not now arguing the question whether or how far this action on the part of trade combinations is morally justifiable. My point is simply that the towns have flourished at the expense of the country by the use of these methods, and that the countryman must adopt them if he is to get his own again.

This truth will be easily realized if we look for a moment into the problem of distribution as it applies to agricultural produce and see what the essentials of it are. This produce finds its chief market in the great cities. Their populations must have their food sent in so that it can be rapidly distributed; and this requires that the consignments must be delivered regularly, in large quantities and of such uniform quality that a sample will give a correct indication of the whole.

The fulfillment of these three conditions is not within the power of isolated farmers, however large. It is an open question whether farmers should themselves undertake the distribution of their produce through agencies of their own, thus saving the wholesale and possibly the retail profits. But unquestionably they should be so well organized at home that they can take this course if they are unfairly treated by organized middlemen. The Danish farmers, who are very highly organized, have established (with government assistance which their organization enabled them to secure) a very efficient machinery for distributing their butter, bacon, and eggs in the British markets. Other European farming communities are be-

coming equally well organized, and so will control the cost of marketing their produce. But where, as in America and the United Kingdom, the town dominates the country, the machinery of distribution is owned by the business men of the towns and is worked by them in their own interests. They naturally take from the unorganized producers, as well as from the unorganized consumers, the full business value of the service they render. With the growing cost of living, this is a matter of urgent importance to the towns. In the pending cheaper-food campaign, voices are heard calling the farmers to account for their uneconomical methods.

## THE PROBLEMS OF COUNTRY LIFE— DISCUSSION.

James Bryce: I regret that I came in so late, having been detained by an urgent engagement elsewhere, and that I have only been able to hear the last few minutes of Sir Horace Plunkett's address. I am not, therefore, in a position to offer any comment upon that address, but may venture to say that I am sure from what I know of Sir Horace Plunkett's views that I should entirely have agreed with what he said, and I might even go so far as to say that I should have agreed with what Sir Horace Plunkett said that he was going to say, but had not time to say. I welcome this opportunity of bearing witness to the admirable work which Sir Horace has done in Ireland. Sir Horace has spent infinite time and labor with admirable patriotism and admirable patience in showing the Irish farmers how much more they might make of their land than they have hitherto done, and in particular how much may be effected by the adoption of a coöperative system. Coöperation has proved very effective in Denmark, and there is no reason why it should not work equally well in Ireland. Indeed, under the guidance of Sir Horace, an excellent beginning full of promise has already been made in Ireland.

On the subject of rural life I need hardly say that I am in hearty sympathy with those who desire to make it more attractive and to stop that inflow to the cities of rural population, which has become a grave evil in Europe as well as here. The growth of very large cities exceeding a million in population is fraught with many

dangers—it is not only dangerous to health, but dangerous from an economic, social, and political point of view also. In this country there seems to be no limit to the increase of cities with populations which are already vast, such as New York and Chicago. Could not something be done to make it worth people's while, worth the the while in particular of manufacturers, to withdraw from the great cities all those industries which could, equally well, be carried on in smaller cities? Twenty cities of 50,000 people each were far better than one city of a million, and if they were systematically planned, the land could be bought so much cheaper both for the manufacturing works and for the dwellings of the workers, that there ought to be a distinct economic advantage in planting the industry in a smaller city. Is it not a great economic loss that workmen coming to their work in the centre of a great city should be obliged to spend an hour or more than an hour in traveling each way, so that possibly from 2½ to 3 hours of their whole time available for labor is taken up in journeying to and from their work—that journeying not being really in the nature of rest, such as a man can get at his own home. The total loss of working time involved in the travel of New York workmen over the great distances they have to cover represents an enormous aggregate pecuniary loss in the year, and much of this loss is surely preventable. Attempts are already being made in England to plant cities in the country and establish in them industries capable of being carried on as well in one place as in another, assuming, of course, that there exist, in the spots selected, adequate transportation facilities.

Reverting for a moment to the question of coöperation, it has struck me in traveling in the South that it might

be possible to get the small negro farmers to coöperate and in that way to improve their condition and their methods of agriculture. My actual knowledge of the conditions there is only that of a passing traveler, but the notion, which has probably occurred to many of those present, seems to deserve consideration, and I believe that Sir Horace Plunkett, whose judgment is of great weight in American as well as Irish questions, is of the same opinion.

In his recent very interesting book, entitled "The Story of the Negro," Mr. Booker T. Washington gives an instructive instance in which the small farmers did so coöperate, with excellent results.

T. N. Carver: The idea, so widely prevalent, that the city tends to draw the better elements from the rural population, needs some qualification, though there may be some truth in it. The probable truth is that the city draws the best and the worst from the country. This is perhaps due in part to the inherent differences between urban and rural industries. Whatever may be true of the future, it is true up to the present moment that the country is the place of small industrial units, whereas the city is the place of large industrial units. This means that in the country the average man is his own employer, whereas in the city he is the employee of somebody else. This in turn is due to certain fundamental conditions affecting the different classes of industries. Agriculture is an industry of small units, not because there are no advantages in large scale production in agriculture as well as in manufacture, but because the disadvantages are out of all proportion to the advantages. The disadvantages are due to the difficulty of adequate supervision; and they arise from three

causes, which may be classified as (a) geometrical, (b) seasonal, and (c) temperamental.

By geometrical difficulties I mean the fact that agriculture on a large scale has to be spread over such a wide area of land as to make it difficult for the manager or superintendent to keep the whole industrial unit in sight, and also for him to get from one part of the establishment to another. A corn farm employing a thousand men would be so difficult to administer, on account of these purely geometrical reasons, as to make it less efficient than a smaller farm.

By seasonal difficulties is meant the necessity of changing the character of the work on the farm, not only from season to season, but from month to month, from week to week, from day to day, and sometimes from hour to hour. In a factory it is sometimes possible to give a man one job and keep him at it indefinitely, so that an establishment once organized and started running requires no frequent reorganization. On the farm, however, where the work changes so frequently, it is necessary very frequently to reorganize the work, to assign each man to a new task and see that he does it properly. In a factory it is possible sometimes to invent automatic checking devices so that the efficiency and quality of a man's work are recorded without very close supervision. On a farm, however, where the work changes so frequently, none of these automatic checking devices are possible; and the manager must not only assign every man his job, and that very frequently, but he must also be able to see that each man's work is done efficiently, and that he keeps at it. Therefore, to manage a dozen men on a farm requires executive ability of a high order. To manage a hundred would require an executive genius equal to that of a railway magnate, a military commander, or a merchant prince; while to

manage a thousand efficiently enough to compete with smaller concerns may be said to be a human impossibility. By reason of these facts, the small unit, where the average man is self-employed and must direct his own labor, is the prevailing type in the country.

But it happens that the pain of continually deciding what to do next is very severe to men with little initiative. The country is no place for such men, and they naturally drift to the cities, where all such questions are settled for them by bosses and foremen, aided by automatic checking devices. There are left, therefore, in the country the men of initiative, of strong individuality, men who do not herd together easily, and who are not easily controlled by a boss or a demagogue. This, therefore, is the important qualification which ought to be made to any general statement that the city tends to draw away from the country its best and most progressive elements.

Horace Plunkett: What Professor Carver says regarding the individuality of the farmers and the difficulty of organizing them, is unfortunately true. The farmer, we know, is everywhere the most conservative and individualistic of human beings. He dislikes change in his methods, and he venerates those which have come down to him from his father's fathers. Whatever else he may waste, these traditions he conserves. He does not wish to interfere with anybody else's business, and he is fixedly determined that others shall not interfere with his. These estimable qualities make agricultural organization more difficult in Anglo-Saxon communities than in those where clan or tribal instincts seem to survive. I may mention, in passing, that I should expect the Negroes of the South to be easily organized. It is fair to the farmer to admit that his calling does not lend itself easily

to associative action. He lives apart; most of his time is spent in the open air, and in the evening of the working day physical repose is more congenial than mental activity. But when all this is said, we have not a complete explanation of the fact that American and British farmers persistently disobey an accepted law and refuse to follow the almost universal practice of modern business.

In Ireland, where the analagous problem is far more urgent, we have an Agricultural Organization Society, whose function is merely to show farmers how to reorganize their business on coöperative lines. We have to work against difficulties which have no counterpart in the United States; yet we manage to make steady progress. Organized bodies of farmers are learning how to purchase their agricultural requirements of the best quality and at the lowest price, and to compete with the foreign importer in exercising control over the distribution of their butter, eggs, poultry, and other produce in the British markets. About half the export of Irish butter comes from coöperative dairying societies.

But of the many objects for which Irish farmers combine, that of getting working capital upon more favorable terms will perhaps be the most interesting to American agriculturists. In the poorest Irish districts a large number of coöperative credit asociations have been formed, mainly with the object of enabling their members to escape from the degrading indebtedness to storekeepers and usurers which is the invariable lot of unorganized peasantries. These associations borrow upon the joint and several unlimited liability of their members. They lend money to their members, under rules and regulations which are designed to meet one of the great financial grievances from which all farmers suffer. The

ordinary banks lend money to agriculturists for a term (generally ninety days) which has been fixed to suit the needs of town business. Thus, a farmer borrows money to sow a crop and has to repay it before he harvests it; or to purchase young cattle, and has to repay before they mature and are marketable. The coöperative association lends only for what is technically called a productive purpose—that is, a purpose calculated to make a profit for the borrower. Furthermore, the committee. who know the character and capacity of the borrower and can judge of the soundness of the purpose, fit the term of the loan to the requirements of the case. These details illustrate my main contention—that one of the chief advantages of organization to the farmer is that it enables him to do his business in a way that suits him, instead of adopting a town-made system unsuited to his needs.

Our Irish coöperative movement, taken as a whole, is today represented by nearly one thousand farmers' organizations, with an aggregate membership of some one hundred thousand persons, mostly heads of families. Its business turnover last year was twelve and a half million dollars.

# VALUATION OF PUBLIC SERVICE UTILITIES.

HENRY C. ADAMS.

There can be no difference of opinion as to the class of industries included under public service industries; no time, therefore, need be given to the discussion of their character or to an explanation of the relation which they hold to the industrial or social order. The only pertinent classification of public service industries in view of what I have to say is suggested by the fact that some are operated upon a perpetual franchise while others are operated on frachises which terminate at a specific date; this being the case, the question of classification may be dropped for the discussion. The technical process of making an appraisal of physical properties, or of the method of computing franchise values, is of little interest to those for whom this paper is prepared; and, for that reason, this class of questions also may be passed without comment.

Having thus set aside three of the points which might properly claim attention in any complete treatment of the subject, we are prepared, without further prefatory remark, to come at once to the heart of the question; namely, of what use is a valuation of the property of public service industries? My reply to this question rests upon three propositions:

1. An authoritative valuation is essential for determining the reasonableness of the price paid by the public for services rendered.

2. Without an authoritative valuation it would not be possible to administer in an equitable manner

laws for the control of the issue of securities by public service corporations.

3. The amount which a public service industry should pay annually to the public treasury, commonly, though erroneously, called taxes, cannot be determined independently of an analysis of the value of the industry considered as a commercial concern.

The above propositions will be considered in the order named.

## I.

### *Relation of Valuation to Rates.*

It not infrequently happens that a strong policy is made to appear weak by being burdened with claims it was never intended to carry. Commonly this method of weakening the force of an argument is the work of those who are opposed to the policy for which it stands; but, unfortunately, so far as the valuation of railways is concerned, this method is indulged by the professed friends as well as by the avowed enemies of valuation. The usual argument in support of railway valuation is that valuation is necessary for the application of cost accounting to transportation services and that cost accounting is the only logical and certain means by which the reasonableness or unreasonableness of a rate can be established. This is no time for a review of the limitations of cost accounting, nor is such a review necessary for the purpose contemplated by this paper. Its mention is only justified in order to clear the way for constructive analysis along broader lines. Speaking for myself, I do not believe that the principles which underlie cost accounting are pertinent for the solution of the problem of reasonable rates, nor do I have much confidence in the judgment of experts, whether they be

experts in the employ of the carriers or of commissions, who claim that they can compute the amount of net revenue contributed by a particular rate. This paper assumes that it lies beyond the ability of statistics and accounts to measure the specific cost of a specific service under specific conditions, and if the only argument that can be urged in favor of valuation is that it is necessary in order to work out the theory of specific costs, that argument is indeed weak. Who can defend a proposition that is urged on the ground of its necessity for the attainment of an end which for other reasons is unattainable?

What then, it will be asked, is the relation of valuation to the determination of reasonable rates, and how may that relation be urged in support of a general valuation of railway property? In order to answer this question, I must restate the cost principle so as to make it both reasonable and practicable. That the cost of doing a business is an essential element in arriving at a proper price for the service rendered, is universally conceded; but there are two ways in which the rule of cost may be applied. It may be urged, as already indicated, that specific cost should be measured against specific service; or it may be urged, as seems to many preferable, that total cost should be measured against collective service. If this latter statement of the rule be accepted, the argument for valuation is relieved from the embarassment of carrying the questionable claims of cost accounting, but is in no way weakened so far as its fundamental propositions are concerned. This latter application of the rule of costs rests upon the assumption that the owners of property devoted to the public service are granted their constitutional rights, so far as rates are concerned, when it is shown that the aggregate of charges for the

aggregate of services rendered is adequate to afford a reasonable return upon necessary investment. I do not know of any case in which this idea, put in exactly this way, has received the unqualified approval of the courts. The tendency, however, is in this direction; and it is upon the importance of the full realization of this tendency that the argument for valuation must finally rest. There is no knowledge at the present time, nor indeed any pretense of knowledge, respecting the amount of private property invested in public service industries, and yet that knowledge is essential in order to enable the courts to exercise judgment as to the reasonableness of rates in the manner in which they say it must be exercised.

All this seems elemental and convincing. The impression, however, will be strengthened if we consider for a moment the kind of information with which the courts must now content themselves in the application of the rule laid down. The only general statement relative to property furnished by a corporation is found in the balance sheet; that is to say, in the statement of corporate assets and corporate liabilities. As matters stand in this country, the outstanding securities of a corporation can not be accepted as a measure of the property which should be supported by contributions from the public. Were this true, there would be no question of over- or under-capitalization. Nor can the market value of the securities serve as a measure of the investment which may reasonably claim support at the hands of the public, for the reason that the market price is a price which depends upon an existing schedule of rates and can not, therefore, be accepted in testing a rate schedule.

Many illustrations might be submitted showing that neither the par nor the market value of securities is a

measure of value to be supported by public contributions, but I shall content myself with a single class of cases. What can be said of an electric railway operating upon a limited franchise which sells securities to the full extent of what its commercial value would be if it had a perpetual franchise? What court in computing the cost of service would feel itself warranted in allowing an interest charge upon the full amount of such an issue of securities? These questions are too simple to require specific answer, and yet it is the rule rather than the exception that corporations which operate upon limited franchises received from municipalities issue securities far beyond the present value of the property, were that value to be computed in view of the fact that all rights of operation are to cease at a specific date. In this class of cases it is beyond question that outstanding securities are no measure of the property which has constitutional right as against the reduction of rates or charges, and the same conclusion would follow the discussion of any other class of cases. We may, therefore, pass without further comment the suggestion that the amount of outstanding securities is a measure of the property which the constitution had in mind when it says that property can not be taken without due process of law.

The case is not much better if we turn to the debit side of the balance sheet. It is true that the first item mentioned among assets is "cost of property" and, provided the accounts of the corporation have been properly kept from the beginning, commissions and courts would be able to read from the asset side of the balance sheet a figure which would properly express the constitutional definition of the value of the property; but as the Interstate Commerce Commission said in its twenty-second annual report to Congress: "No court, or commission,

or accountant, or financial writer would for a moment consider that the present balance sheet statements purporting to give the cost of property suggest even in a remote degree a reliable measure either of money invested or of the present value." This may be regarded as a sweeping statement, but no one acquainted with the financial history of great corporations or with the financial accounting of public service industries would venture to question its truth. In many cases the construction account bears no relation to the cost statement of the company that holds the title; in many cases physical property has been abandoned without corresponding credits on the property ledger; in many cases improvements have been made from revenue without charges to the property accounts; in many cases consolidations and reorganizations have been carried through without regard to the physical properties concerned or to the equities of the original investors; in many cases, indeed in most cases, the amount entered as cost of property is simply the par value of securities set up as an asset. Such being the situation, the balance sheet statement of cost of property is even less acceptable as a basis for working out the constitutional rule relative to the reasonableness of rates than the balance sheet statement of outstanding securities.

There are no other figures, however, furnished by the carriers which have any bearing whatever upon the constitutional definition of property, and, if the rule proposed by the courts relative to the reasonableness of rates charged by public service industries is to become a practical rule, it is essential that the government should undertake such an analysis of properties concerned as will enable the rule to be worked out in a reasonable manner. Looked at from this point of view, the problem of valuation is much broader than any particular program or

method of computation. It is rather an essential element in an existing situation. It is the next great step for which Congress must provide in order to realize that theory of supervisory control contemplated by the Act to Regulate Commerce as amended in 1906.

The above argument for valuation is greatly strengthened, when the question of reasonable rates is considered in connection with the fact that corporations engaged in the business of transportation are not all of the same class, and that any rule which might be equitable as applied to one class would lead to unjust and indefensibe results if applied to another class. The situation here referred to, as well as the ideal which lies back of this argument for valuation, holds true in any large railway system created by the consolidation of previously competing lines. An analysis of such a system would show a gradation of lines beginning with those which are incapable of supporting themselves at the rates which are allowed and ending with those which, according to any conceivable rule for assigning revenues, show a revenue in excess of what would be necessary if the constitutional rule of reasonable rates were applied exclusively to lines of the highest class. It is commonly conceded as one of the social benefits of consolidation that territories, which, considered by themselves, could not support a railway on the basis of accepted rate schedules, are provided with transportation facilities because the lines which serve them are integral parts of a great system. This beneficent social result of consolidation, however, implies the annihilation of competition so far as the several classes of railways which make up a great railway system are concerned, and at this point our illustration ceases to reflect the conditions with which commissions are called upon to deal. It is one purpose of supervision by commissions to perpetuate the conditions

of competition in the business of transportation. This cannot be accomplished unless the agencies of governmental control recognize the fact that the railways with which they deal are of different classes and that a rate which would be reasonable for the roads most favorably situated would result in the bankruptcy of lines operating under inferior conditions. This is the situation, and it is largely because of the fact that inferior and superior railways are in competition for the same traffic that commissions and courts encounter serious difficulties in determining the reasonableness of a rate submitted in a specific case. This line of reasoning carried to its logical result would warrant the statement that there is no such thing as a reasonable rate *per se*. Every rate must be judged according to the place it occupies in a schedule of rates, and a schedule of rates for any particular carrier, in its turn must be jduged according to the relation which it bears to the schedule of rates appropriate for other and competing carriers.

If considerations of this sort be accepted, it seems an essential part of any program for arriving at tenable conclusions relative to rates, to classify all common carriers, and to measure by some appropriate method the differences which exist between the various classes. Several lines of classification might be suggested but none of them is as simple, nor will prove to be as convincing, as a classification resting upon an analytical valuation of railway properties. In order to deal justly by those who invest in public service industries on the one hand, and by the different communities served by railways of different classes on the other, it is essential that legislators and commissions should exercise reasonable discrimination. This cannot be done unless the railway system is held in mind in its entirety, and perhaps one of the prime argu-

ments in support of a valuation of railway property springs from the fact that out of such a valuation there would emerge a comprehensive and at the same time a detailed picture of the railways of the country considered as a whole. The railway system of the United States is a unit and must be treated as a unit; at the same time it is made up of many parts, each of which has its peculiar interest and renders its peculiar service. How is it possible to deal in a discriminating manner with such a situation in the absence of comprehensive and detailed information as to the physical and commercial elements that make up that great system? This argument for valuation will be regarded as a weak argument by those who still insist on the morselization of transportation industries; it will be regarded as a strong argument, however, by those who regard the problem in a broad and comprehensive manner.

## II.

### *Relation of Valuation to Capitalization.*

The second argument in support of valuation rests upon the claim that an authoritative valuation is necessary in order to administer laws for the control of the amount of securities to be issued by public service industries in a manner equitable alike to the public and to the corporations. The consideration of this argument, however, is omitted for the reason that even its cursory discussion would extend this paper beyond the prescribed limits.

## III.

### *Relation of Valuation to Taxation.*

I shall not enter upon a discussion of the problem of railway taxation farther than to suggest the necessity of

an analyzed statement of values for its successful solution. The economist is familiar with the phrase, differential profit, and nowhere does the line of reasoning to which this phrase is related promise more far-reaching results than when the amount to be contributed to the public treasury by railways and other public service industries is under consideration. If what was said above relative to classification be accepted, it follows without question that the basis of a reasonable set of rate schedules for railways must be a schedule which will enable all roads which render a useful service to live and prosper. Any other conclusion would mean that certain parts of this country would not be provided with railway facilities necessary for their social life and industrial development. It is, however, evident that a set of rate schedules adjusted to this idea would contribute a revenue in excess of reasonable revenue to other roads more favorably situated. That is to say, these roads would be in the permanent enjoyment of a surplus profit over the constitutional limit. For myself, I cannot evade the conclusion that equity, as between various classes of roads, can never be attained until all the excess of revenue over the constitutional limit be made a contribution to the public treasury, and that this contribution be made as a substitute for all taxes of all kinds and all sorts. To work out this idea, or indeed to work toward this ideal, even under the form of a general property tax, calls for a properly analyzed and properly classified valuation of railway property.

The same thought may be stated in another way. Students of finance are familiar with what is known as the doctrine of "amortization", which, simply stated, means that a tax imposed upon property (under certain conditions) will be capitalized and the capitalized amount

will be deducted from its valuation to arrive at its selling price. If this be true, it is evident that the taxation of property implies a partnership between the government and the individual who holds the title to the property taxed. It is further evident that the balance sheet of a taxpayer, in case he keep a set of books, would fail to show, for example, that portion of the value which pertains to government,—that is to say, the capitalization of the annual tax. In the case of property subject to frequent purchase and sale, there is an automatic separation of the value which pertains to the public and that which pertains to the individual in his private capacity; in the case of public service industries, however, for whose property, considered as an industrial unit, there is no market and consequently no market price, it is not possible to rely upon purchase and sale to distinguish between that portion of value which pertains to the public and that which, in equity, pertains to the corporation. A formal valuation, therefore, is necessary in order to accomplish the result for public service industries which is automatically accomplished through commercial agencies in industries which are exposed to the control of commercial competition.

In the case of public service industries, however, the government is a partner in a peculiar sense. The municipalities furnish the streets for the operation of electric railways. They grant exclusive rights and assume unusual responsibilities. The industrial situation, also, wherever competition is limited in its application or works in an abnormal manner, enables industries of the class we are now considering to cover in their balance sheet statements of property, not only the amount necessarily contributed by stockholders and bond holders for its creation and operation, but amounts which, according

to any analysis of the situation from the social point of view, belong to the public. It seems highly desirable, therefore, in order that the financial relations which exist between the public and the corporations engaged in rendering public services may be clearly understood and accurately measured, that a valuation of all properties of this class be made; that the amount thus arrived at be classified as pertaining to the public and to the corporation; and that the contributions from the corporation, commonly called taxes, be made the equivalent of a dividend to the public on its portion of the total value.

It may at first seem a little extreme to analyze a tax into a dividend, but this analysis is not so foreign to current economic thinking, nor indeed to the laws in many of our states or to some of the early charters upon which certain railway corporations are now operating, as to warrant its being wholly ignored. At least it may be said, and this by itself is conclusive for valuation, that the mass of information which would be gathered together as the result of a general program of valuation would throw light upon many of the dark places which now exist when discussing the question of reasonable contributions for the support of the state from public service industries.

I have endeavored in this short paper to fix attention upon those fundamental propositions of equity and of industrial development which are now pressing for solution. Valuation is not a panacea. It is not the only thing that need be considered when considering the problem of public industries. It is, however, in my judgment, an essential part of any program for the satisfactory understanding of those complicated relations which exist between government and public service industries in our modern complicated industrial and political organization.

# VALUATION OF PUBLIC SERVICE CORPORATIONS.

W. H. WILLIAMS.

Exchanges of the surplus products of individuals, communities, and nations constitute commerce. Formerly local communities had no market for their surplus products and found it necessary to produce all commodities required for the subsistence of their inhabitants. Transportation made possible interchanges between communities and nations, and these interchanges have multiplied as transportation has improved. Productive efficiency necessitates local specialization of industrial functions, and, in the proportion in which it is successfully obtained, does transportation approach perfection.

It is not in the original cost of a railway, nor in the condition in which maintained, but in the extent to which it serves to effectuate these interchanges that a railway has value. The value of a railway lies, then, not in its physical property, but in the use of that property. Value begins with use and increases as use increases.

"But the value of property results from the use to which it is put and varies with the profitableness of that use, present and prospective, actual and anticipated. There is no pecuniary value outside of that which results from such use."[1]

The things that secure a broad, extensive, and profitable use are, therefore, the things which give value to a railway. Among these are:

1. The location of the railway with reference to natural resources producing traffic. If two men were each to

[1] C. C., C. & St. L. Ry. v. Backus, 154 U. S. 445.

start to construct a railway in a country devoid of transportation facilities, one or the other would, in the exercise of a superior judgment, so locate his railway as to obtain a more profitable traffic. This is an advantage of judgment which should apparently receive proper compensation.

2. The location of the route selected with reference to economical construction and service. Almost any two communities which might exchange traffic are connected by several routes, but there is always one route over which the railway can be built most economically and perform the service at least cost. The route which is superior today may become inferior in the near future through the development of business to a volume which would warrant construction over a more costly route in order to obtain more economical operating conditions. The selection of the particular route which, while sufficiently adapted to the conditions of the time, also provides as far as may be for future growth, and involves a very high type of business judgment and one which cannot be enlisted in the public service, unless the opportunity for reward is left open. The most desirable route at any given time is that which gives the greatest traffic per dollar of necessary investment.

3. Suitable construction and equipment. Equipping the railway with such terminal facilities, passing tracks, rolling stock, and other appliances as are best adapted to the needs of the traffic.

4. Such combination of capital and labor, and efficiency of management as will secure the maximum traffic per dollar of expenditure. This involves good service, a fair wage, reasonable rates, and the maintenance of good relations with the investing public, employees, shippers, and connecting lines. It is a combination of all these factors which secures the cheapest cost, the highest wages, and the best profits.

The question is, shall the railways be permitted that profit which is the ordinary reward of effective manage-

ment, and hope of which is the only means of securing the greatest production per dollar expended, or shall they be limited to an investment return on the capital employed.

Capital cannot be interested in any undertaking if its maximum reward is limited to an investment return unless, at the same time, it is reasonably assured that it will not get less. Such an assurance cannot be had under the conditions at present surrounding our railways.

While the existence of a railway renders the building of another in the same locality less probable, the possibility of rivalry grows as success becomes assured or increases. Previous occupancy gives no prescriptive right. This competition is not limited to a parallel line, but may be that of a line seeking to market the surplus products of a community not served by both. In either case the original line suffers a reduction in tonnage, and a corresponding loss of revenue unless rates are increased. This loss may not only prevent any return to the investor, but may even cause insolvency. It will continue until traffic increases sufficiently to support both lines. In like manner competition may develop through the combination of two or more existing lines for through service, and with the same disastrous results to the investor in the original railway. Capital, therefore, incurs risks which must be compensated if additional capital is to be secured, either for the construction of new lines or the extension and betterment of those already constructed—both of which are necessary to handle rapidly increasing traffic.

Further, unless there be a profit beyond the investment return, there is no reward for the conception of the undertaking, its economical construction, the subsequent additions of improved machinery and appliances, the

introduction of economies of operation, nor the maintenance of harmonious relations with the public and connecting lines, all of which are necessary to secure the greatest amount of traffic per dollar expended.

No railway can be required to move any traffic at less than the cost of the service performed, plus a fair return on the fair value of that which is employed in rendering such service.

Thus, in approaching the question of valuation of railways, we must bear in mind that commerce cannot exist without transportation facilities; that adequate transportation facilities cannot be had unless capital is attracted, and unless sufficient inducements are offered to secure effective management.

The following questions present themselves: Can a "fair valuation" be made? By what method should it be reached? For what practical purposes can it be used? By whom should it be undertaken?

Accurate nomenclature is the beginning of profitable discussion. No benefit will result from any argument unless the participants have a common understanding of the terminology employed. "Valuation" seems to relate to "value" and a "railway valuation" would seem to be a process of ascertaining "railway value." Value, however, is a ratio in exchange; that is to say, in commerce. It is the relation which the law of supply and demand has, for the time being, established between one commodity and another. Value, then, is an incident of commerce, and cannot exist without it; and to qualify the term "value" by the word "commercial" is superfluous, for all value must be commercial. When it is proposed, therefore, to undertake something which is not to be a "commercial valuation", it is plain that the thing to be ascertained, whatever it may be, cannot be "value."

The thing now proposed is not new, although its advocates have been pleased to give it a new name. What they are really proposing is to ascertain "cost of reproduction less depreciation."

Through laying undue stress upon the present value of material in place, much confusion has arisen regarding the elements entering into value. This is caused largely by using the term "physical valuation" instead of "present cost of reproduction." This confusion has become so great that many regard the present value of material in place as constituting the only element in such value. Little attention has been given to value derived from use. It is unfortunate that so well known a phrase as "cost of reproduction" should give place to one which is little understood and has already proved misleading.

Nothing is clearer than that the present agitation does not contemplate an ascertainment of the actual value of the property.

Census Bulletin No. 21 purported to give a commercial valuation of railway operating property in the United States in 1904.[2] In the introduction, Professor Henry C. Adams, Statistician of the Interstate Commerce Commission, stated that it was based on the two fundamental

[2] "The two fundamental consideration by which the market is influenced in placing a value upon property when bought or sold, are the expectation of income arising from the use of the property, and the strategic significance of the property. These two considerations are made the basis of the valuation of railway property submitted in this report. . . . . . . . . . . . .

"The commercial valuation of railway property, in so far as it depends on income arising from the sale of transportation, is the result, among other things, of an established schedule of freight and passenger rates, from which it follows that such a valuation cannot be used for determining the reasonableness or unreasonableness of the rates in question. The solution of the rate problem demands a separate valuation of the physical property." (H. C. Adams, Census Bulletin No. 21, 1904. P. 8.)

considerations by which the market is influenced when property is bought or sold, namely, the expectation of income arising from its use and its strategic significance. In May, 1906, Professor Adams quoted the conclusions he had expressed in Census Bulletin No. 21, and urged an "inventory valuation", which he also called a "physical valuation."[3]

That the Commission recognized a distinction between what they have erroneously termed "physical valuation" and what the courts have determined to be "fair value", is clearly indicated in their correspondence in 1908 with the Committee on Interstate Commerce of the United States Senate. A bill was then pending before the Committee directing the Commission to ascertain the "fair value" of railway property. They objected to the use of the term "fair value" and asked to have substituted a direction providing only for "cost of reproduction."

"The bill in question makes use of the phrase 'fair value.' Unless there is some legislative necessity, which we do not perceive, we question the advisability of using this phrase.

"It would seem to us preferable to substitute a phrase which indicates the fact that Congress desires an inventory valuation of railway property. By inventory valuation is meant that the property of the several railways shall be listed in detail, and that each kind or class of property so

[3] "If the above distinction be conceded, it is evident that what is needed is an inventory by a competent engineer, which would result in the classification of the physical elements of railway properties and an assignment to each element of its appropriate present value.

"It is evident that a physical valuation of railway properties might be more or might be less than the value computed from earnings on the basis of an established schedule of freight and passenger rates, and it would be highly desirable from many points of view to determine to what extent the physical valuation was more or less than the commercial valuation." (Letter of H. C. Adams to Chairman of the Interstate Commerce Commission, May 24, 1906.)

listed shall have assigned to it a valuation to be determined from the point of view of the contracting engineer and not from the point of view of a court or board of arbitration which, from the nature of the case, can not judge of what is 'fair value' except in the light of some specific use to be made of the valuation."[4]

The Commission have presented no argument in support of this protest against the determination of the "fair value", nor any definite plan for arriving at the "cost of reproduction", nor have they satisfactorily indicated the use to be made thereof if it can be ascertained. Their letter suggests that the valuation is not wanted for any specific purpose. Their objection to the phrase "fair value" is especially difficult to understand in the light of their own previous statements and of numerous decisions of the courts. In their second annual report (1888) they state:[5]

"The present value of a railroad property is necessarily very largely a matter of opinion only; it depends upon a vast number of contingencies and uncertainties. A road apparently of great value today may soon become worthless by the opening of a competing line having superior advantages, or by the competitive struggles of other lines which operate to reduce the income of all; the value of a railroad largely results from the personal characteristics of its officials; the policy pursued by its directors, whether conservative and economical or aggressive and daring, is a great factor in the determination of the current value of the property; a railroad property is not necessarily worth what it would cost to replace it, and, on the other hand, it may be worth very much more than that."

thus admitting the existence of many elements other than

[4] Letter of the Chairman of the Interstate Commerce Commission to Hon. Stephen B. Elkins, Chairman Senate Committee on Interstate Commerce, March 25, 1908.

[5] Page 64.

"cost of reproduction" that enter into the "fair"value of a railway property. Possibly it is because they continue to feel that "the present value of a railway property is necessarily very largely a matter of opinion only" that they do not wish to assume the responsibility of venturing an opinion which may, in its use, be so unfair to the capital and labor affected.

The importance of ascertaining their objections to the term "fair value" is further emphasized when considered in connection with the many expressions of the courts in matters affecting the valuation of railway property.

In the case of Smyth vs. Ames, 169 U. S., 466, the Supreme Court, while enumerating a number of items entering into the valuation of a railway, said:

"We do not say that there may not be other matters to be regarded in estimating the value of the property."[6]

[6] "If a railroad corporation has bonded its property for an amount that exceeds its fair value, or if its capitalization is largely fictitious, it may not impose upon the public the burden of such increased rates as may be required for the purpose of realizing profits upon such excessive valuation or fictitious capitalization; and the apparent value of the property and franchises used by a corporation, as represented by its stocks, bonds, and obligations, is not alone to be considered when determining the rates that may be reasonably charged." (Smyth v. Ames, 169 U. S., 544).

"We hold, however, that the basis of all calculations as to the reasonableness of rates to be charged by a corporation maintaining a highway under legislative sanction must be the fair value of the property being used by it for the convenience of the public. And in order to ascertain that value, the original cost of construction, the amount expended in permanent improvements, (*a*) the amount and market value of its bonds and stock, the present as compared with the original cost of construction, (*b*) the probable earning capacity of the property under particular rates prescribed by statute, and the sum required to meet operating expenses, are all matters for consideration, and are to be given such weight as may be just and right in each case. We do not say that there may not be other matters to be regarded in estimating the value of the property. What the company is entitled to ask is a fair return upon the value of that which it employs for the public convenience. On the other hand

In the case of the Chicago, etc., R. Co. vs. Minnesota[7] the Supreme Court emphasized the necessity of treating the railway company and the shipper with equal fairness.

In the case of Metropolitan Trust Company vs. Houston & Texas Central Railway (being an appeal from rates established by the Commission based on "the estimated cost of reproduction of the road"), the court ruled that the Commission had underestimated the value of the property, having made no allowance for its favorable location; and that:

"In view of the advance in prosperity of the country through which it runs, and the increment to its value due to the settling, seasoning, and permanent establishment of the railways, and to the established business and the good will connected with its business, which has been established through a long series of years, and all of which ought reasonably to be considered in fixing the value of the property and the capitalization upon which at least it is entitled to earn, and should pay, some returns by way of interest or dividends . . . . as popularly expressed, the rights of the people—the rights of shippers who use it as a carrier—have to be regarded; but, as judicially expressed, these last have to be so regarded as not to disregard the inherent and reasonable rights of the projectors, proprietors, and operators of these carriers. . . In countries conditioned as Texas has been and is, such a railroad property and business cannot be reproduced, except substantially in the same manner in which this has been produced, that is, by judicious selection of location, by small beginnings, and gradual advance through a number of years, more or less, of unproductive growth. The particular location of this road, of course, cannot be reproduced, and it cannot be appropriated by another private or quasi-public corporation carrier by the exercise of the state's power of eminent domain. And even if the

what the public is entitled to demand is that no more be exacted from it for the use of a public highway than the services rendered by it are reasonably worth." (Smyth v. Ames, 169 U. S., 546).

[7] 134 U. S., 418.

state should proceed to expropriate this property for the purpose of taking the same to itself for public use, the location of this road cannot be appropriated any more than any other property right of a natural person or of a corporation can be appropriated without just compensation. It is, therefore, not only impracticable, but impossible, to reproduce this road, in any just sense, or according to any fair definition of those terms. And a system of rates and charges that looks to a valuation fixed on so narrow a basis as that shown to have been adopted by the Commission, and so fixed as to return only a fair profit upon that valuation, and which permits no account for betterments made necessary by the growth of trade, seems to me to come clearly within the provision of the Fourteenth Amendment to the Constitution of the United States, which forbids that a state shall deprive any person of property without due process of law....."[8]

Thus the court not only clearly set forth that the estimated cost of reproduction of a road is inadequate as a basis of railway valuation, but itself suggested some of the other elements entering into such valuation.

In the case of Wilcox et al. vs. The Consolidated Gas Company of New York City, the Circuit Court of the United States for the Southern District of New York undertook a very full discussion of the elements of value,[9] and in these particulars its views were approved

[8] 90 Fed., 683, 688, 689.

[9] "As to the realty, the values assigned are those of the time of inquiry; not the cost when the land was acquired for the purposes of manufacture, and not the cost to the complainant of so much as it acquired when organized in 1884, as a consolidation of several other gas manufacturing corporations.

"It is objected that such method of appraisement seeks to confer upon complainant the legal right of earning a fair return upon land values which represent no original investment by it, does not indicate land especially appropriate for the manufacture of gas, and increases apparent assets without increasing earning power. Analogous questions arise as to plant, mains, services, and meters; the

by the Supreme Court of the United States; the latter court saying:

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reported values whereof are the reproductive cost less depreciation, and not original cost to the complainant or its predecessors.

"It appears by undisputed evidence that some of these last items of property cost more than new articles of the same kind would have cost at the time of inquiry; that some are of designs not now favored by the scientific and manufacturing world, so that no one now entering upon a similar business would consider it wise to erect such machines or obtain such apparatus. In every instance, however, the value assigned in the report is what it would cost presently to reproduce each item of property, in its present condition, and capable of giving service neither better nor worse than it now does. As to all of the items enumerated, therefore, from real estate to meters, inclusive, the complainant demands a fair return upon the reproductive value thereof, which is the same thing as the present value properly considered. To vary the statement: Complainant's arrangements for manufacturing and distributing gas are reported to be worth the amounts above tabulated if disposed of (in commercial parlance) 'as they are.'

"Upon authority, I consider this method of valuation correct. What the court should ascertain is the 'fair value of the property being used' (*Smyth* v. *Ames,* 169 U. S., at p. 546; 18 Sup. Ct., at p. 434; 42 L. Ed., 819); the 'present' as compared with 'original' cost; what complainant 'employs for the public convenience' (169 U. S., at p. 547; 18 Sup. Ct., at p. 434; 42 L. Ed., 819); and it is also the 'value of the property at the time it is being used' (*San Diego Land Co.* v. *National City,* 174 U. S., at p. 757; 19 Sup. Ct., at p. 811; 43 L. Ed., 1154. And see, also, *Stanislaus Co.* v. *San Joaquin Co.,* 192 U. S., 201; 24 Sup. Ct., 241; 48 L. Ed., 406). It is impossible to observe this continued use of the present tense in these decisions of the highest court without feeling that the actual reproductive value at the time of inquiry is the first and most important figure to be ascertained, and these views are amplified by *San Diego Land Co.* v. *Jasper (C. C.),* 110 Fed., at page 714, and *Cotting* v. *Kansas City Stock Yards* (C. C.), 82 Fed., at page 854, where the subject is more fully discussed. Upon reason, it seems clear that in solving this equation the plus and minus quantities should be equally considered, and appreciation and depreciation treated alike. Nor can I conceive of a case to which this procedure is more appropriate than the one at bar. The complainant, by itself and some of its constituent companies, has been continuously engaged in the gas business since 1823. A part of the land in question has been em-

"And we concur with the court below in holding that the value of the property is to be determined as of the

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ployed in that business for more than two generations, during which time the value of land upon Manhattan Island has increased even more rapidly than its population. So, likewise, the construction expense, not only of buildings, but of pipe systems under streets now consisting of continuous sheets of asphalt over granite has enormously advanced.

"The value of the investment of any manufacturer in plant, factory, or goods, or all three, is what his possessions would sell for upon a fair transfer from a willing vender to a willing buyer, and it can make no difference that such value is affected by the efforts of himself or others, by whim or fashion, or (what is really the same thing) by the advance of land values in the opinion of the buying public. It is equally immaterial that such value is affected by difficulties of reproduction. If it be true that a pipe line under the City of New York of 1907 is worth more than was a pipe line under the City of 1827, then the owner thereof owns that value, and that such advance arose wholly or partly from difficulties of duplication created by the city itself is a matter of no moment. Indeed, the causes of either appreciation or depreciation are alike unimportant, if the fact of value be conceded or proved; but that ultimate inquiry is oftentimes so difficult that original cost and reasons for changes in value become legitimate subjects of investigation, as checks upon expert estimates or bookkeeping inaccurate and perhaps intentionally misleading. Cf. *Ames* v. *Union Pacific R. R.* (C. C.), 64 Fed., at pages 178, 179. If, fifty years ago, by the payment of certain money, one acquired a factory and the land appurtenant thereto, and continues today his original business therein, his investment is the factory and the land, not the money originally paid; and unless his business shows a return equivalent to what land and building, or land alone, would give if devoted to other purposes (having due regard to cost of change), that man is engaged in a losing venture, and is not receiving a fair return from his investment, *i. e.*, the land and building. The so-called 'money value' of real or personal property is but a conveniently short method of expressing present potential usefulness, and 'investment' becomes meaningless if construed to mean what the thing invested in cost generations ago. Property, whether real or personal, is only valuable when useful. Its usefulness commonly depends on the business purposes to which it is or may be applied. Such business is a living thing, and may flourish or wither, appreciate or depreciate; but whatever happens, its present usefulness, expressed in financial terms, must be its value.

time when the inquiry is made regarding the rates."[10]

"There is no particular rate of compensation which must in all cases and in all parts of the country be regarded as sufficient for capital invested in business enterprises. Such compensation must depend greatly upon circumstances and locality; among other things, the amount of risk in business is a most important factor, as well as the locality where the business is conducted and the rate expected and usually realized there upon investments of a somewhat similar nature with regard to the risk attending them. There may be other matters which in some cases might also be properly taken into account in determining the rate which an investor might properly expect or hope to receive and which he would be entitled to without legislative interference. The less risk, the less right to any unusual returns upon the investments. One who invests his money in a business of a somewhat hazardous character is very properly held to have the right to a larger return, without legislative interference, than can be obtained from an investment in government bonds in other perfectly safe security. The man who invested in

"As applied to a private merchant or manufacturer, the foregoing would seem elementary; but some difference is alleged to exist where the manufacturer transacts his business only by governmental license—whether called a franchise or by another name. Such license, however, cannot change an economic law, unless a different rule be prescribed by the terms of the license, which is sometimes done. No such unusual conditions exists here, and, in the absence thereof, it is not to be inferred that any American government intended, when granting a franchise, not only to regulate the business transacted thereunder, and reasonably to limit the profits thereof, but to prevent the valuation of purely private property in the ordinary economic manner, and the property now under consideration is as much the private property of this complainant as are the belongings of any private citizen. Nor can it be inferred that such government intended to deny the application of economic laws to valuation of increments earned or unearned, while insisting upon the usual results thereof in the case of equally unearned, and possibly unmerited, depreciation." (Consolidated Gas Company v. City of New York *et al.*, 157 Fed. Rep., 849, 854.)

[10] 212 U. S., 52.

gas stock in 1823 had a right to look for and obtain, if possible, a much greater rate upon his investment than he who invested in such property in the City of New York years after the risk and danger involved had been almost entirely eliminated."[11]

In Judge Taft's letter accepting the nomination for the presidency, he said:

"It is clear that the physical value of the railroad and its plant is an element to be given weight in determining its full value; but the value of the railroad as a going concern, including its good will, due to efficiency of service and many other circumstances, may be much greater than the value of its tangible property, and it is the former that measures the investment on which a fair profit must be allowed. Then, too, the question what is a fair profit is one involving not only the rate of interest usually earned on normally safe investments, but also a sufficient allowance to make up for the risk of loss both of capital and interest in the original outlay. The question of rates and the treatment of railroads is one that has two sides. The shippers are certainly entitled to reasonable rates; but less is an injustice to the carriers . . . . The proper conclusion would seem to be that in attempting to determine whether the entire schedule of rates of a railroad is excessive, the physical valuation of the road is a relevant and important but not necessarily a controlling factor. . ."

Therefore, it would seem only wise and prudent to determine, before incurring the enormous expense incident to ascertaining the cost of reproduction, what relation, if any, it will have to the valuation of the railway, that is, to determine how such cost will be used in arriving at value. If it can be used (and I do not today say it can), then consideration must be given to the elements that enter into the cost of reproduction. The plan now

[11] 212 U. S., 48.

most generally advocated is that which has been followed by the several states that have undertaken a valuation of railways. Such valuations were undertaken originally for taxation purposes. Minnesota recently undertook a valuation for rate-making purposes, and Texas for controlling the issuance of capital securities.

There are differences not only in the methods followed by the several states, but there are many items which as yet have not entered into the valuation by any of the states and which should receive proper consideration. Among the items that have been ignored or inadequately treated are:

1. Cost of Surveys. An expenditure of $250,000 for surveys in securing a low-grade line through the Allegheny or Rocky mountains may save from $5,000,000 to $25,000,000 in the ultimate cost of a reasonably low-grade line. This necessitates surveying many routes, only one of which will be used, yet all must enter into the original cost.

2. Rate of Interest During Construction. The allowance of 4 per cent is much below the ability of any new railway undertaking to secure capital. This rate can only be hoped for where new construction is undertaken by an existing line whose credit enables it to secure money at such a low rate.

3. Discount on Securities Sold. Discount is a partial capitalization of commercial risk incurred, and it increases or decreases in proportion to the probable earning power. This practice is justified by long commercial usage, and has had judicial sanction. The only question is whether discount shall be capitalized and a reasonable return thereon allowed, or whether, during the time the securities are outstanding, the amount shall be charged proportionately each year against income. Taking, for example, $20,000,000 five per cent bonds, maturing in fifteen years, selling at ninety, this would result in either,

(*a*) Adding to capital account, the annual interest charge may continue indefinitely to be 5 per cent on $20,000,000 or, . . . . . . $1,000,000 00

or

(*b*) Deducting this discount from income account, *pro rata*, during the fifteen years, the annual charge would be:

| | | |
|---|---|---|
| Annual interest charge (5 per cent), . . . | $1,000,000 00 | |
| Annual amount set aside for fifteen years to overcome discount (not compounded), . . | 133,333 33 | |
| Total annual charge during each of the fifteen years, . . . . . | | $1,133,333 33 |

The second plan reduces the ability to pay fair wages, to pay a fair return to capital, or to lower rates during the twenty years.

Which plan is likely to secure the lower charge for services rendered? Which is the more likely to attract efficient labor or capital? If the sinking fund be not earned, can the deduction be made?

4. Cost of Material. This must include the increased cost of placing material on the ground without railway facilities for transportation. It is a serious error to use a uniform price list for all materials. The source of supply must be considered.

5. Cost of Labor. Labor in construction work is paid a much higher rate than other labor in the same community, owing to the temporary character of the service, and to the limited supply not meeting the increased demand produced by such extensive temporary work. Labor must be brought in from large labor centers. Boarding accommodations must be established and train service in-

stalled to transport men between their places of residence and their places of work.

6. Excavation and Embankments. No uniform price of earth work can be used. It ignores the varying character of the soil and length of haul.

7. Contingencies and Contractors' Profit. The allowance of 5 per cent is too small. Usually the contractor allows not less than 10 per cent profit for himself, in addition to an allowance for contingencies, and then his loss in one undertaking may wipe out his entire capital. For this reason some contracting firms organize a subsidiary corporation for each important piece of construction, thus limiting their liability. Banks, recognizing the great risk involved in contracting, are extremely careful in loaning money to such undertakings. Not only must the item of contingencies, therefore, be sufficiently large to guarantee the contractor against loss, but there must be some reasonable hope of profit for himself.

8. Effect of Machinery on Cost of Construction. There have been many improvements in machinery and other appliances, which tend to reduce the cost of construction, since most of the railways were built,— for example, rail-laying machines.

9. Carrying Charges. Interest on investment and depreciation, if any, of plant prior to time it is placed on a self-sustaining basis. Texas makes this allowance in determining the cost price for the purpose of controlling the issue of capital securities. The Wisconsin Railroad Commission has admitted the right of the investor to capitalize such interest and depreciation.[12]

[12] "But new plants are seldom paying at the start. Several years are usually required before they obtain a sufficient amount of business or earnings to cover operating expenses, including depreciation and a reasonable rate of interest upon the investment. The amount by which the earnings fail to meet these requirements may thus be regarded as deficits from the operation. These deficits constitute the cost of building up the business of the plant. They are as much a part of the cost of building up the business as loss of interest during the construction of the plant is a part of the cost of its construction. They are taken into account by those who enter upon such undertakings, and if they cannot be recovered in some way,

We shall, hereafter, call attention to the relative replacement cost of a new railway and one in existence twenty-five years. Assuming that in each case the securities were issued for the exact original cost, there is then some difference at this time in the relative valuation of the railways as between the capital securities and the replacement value.

While extensions of an existing line can, during the first year of operation, earn a return on the investment, this is almost invariably due to the diversion from some other railway of tonnage controlled by an existing line. A new railroad, without the advantage of traffic thus diverted, will not earn a return during its first years of construction, if indeed it be so fortunate as to earn its operating expenses. During these years, therefore, the traffic does not meet this depletion in the replacement value. This depletion of capital has always been considered as a portion of the cost in securing a profitable going concern. This being true, it is the cost of new material that should be used in determining the present valuation of the railways, and not the cost of new material, less depreciation.

10. Impact and Adaptation. Although other states have not made this allowance, Minnesota has done so in its valuation for rate making purposes.

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the plant fails by that much to yield reasonable returns upon the amount that has been expended upon it and its business. Such deficits may be covered either by being regarded as a part of the investment and included in the capital upon which interest is allowed, or they may be carried until they can be written off when the earnings have so grown as to leave a surplus above a reasonable return on the investment that is large enough to permit it. When capitalized they become a permanent charge on the consumers. When charged off from the surplus, they are gradually extinguished. (These facts alone, however, do not always furnish the best or most equitable basis for the disposal of such deficits.) Whether they should go into the capital account, or whether they should be written off, as indicated, are questions that largely depend on the circumstances in each particular case. (Decision and order of the Railroad Commission of Wisconsin, issued August 3, 1909, in the case of Hill et al. v. Antigo Water Company. Pp. 84 and 85.)

11. Special Conditions Affecting Cost. Additions and betterments made under traffic (and which were made for the purpose of increasing the capacity of the line) necessarily increase the cost of the work.

12. The Cost of Progress. Railways, in their anxiety to render the most satisfactory and economical service, anticipate the future and substitute better facilities and better equipment before the old facilities and equipment actually require renewal or have become obsolete; also before the earnings from traffic would permit the writing off of the earlier appliances.

The following statement by the engineer who made the railroad appraisal in Minnesota is of especial interest at this point:

"It is entirely tenable that the value of an economically constructed, judiciously financed, and efficiently managed railway property, or the contra thereof, is not measured by its cost; and, for instance, it seems necessary to recur to the elementary fact that cost and value are not synonymous and that the determination of the present value of the physical properties, using reproduction cost as a basis, bears no relation to value in the sense of utility, or as an investment."[13]

The following paragraph in the report on valuation of the roads in Michigan is also of interest:

"Another potent reason justifying the plan selected, as afterwards developed, was the necessity of treating the problem strictly as an engineering problem in order to obtain uniform results. It was necessary to employ a large number of engineers expert in railroad work, and while they could agree as engineers they could not agree as experts on taxation. It very soon became necessary to publish an order excluding all thought of taxation in connection with the results to be obtained. The commissioners required of us only the cost of reproduc-

[13] Page 31, Supplement to Annual Report of R. R. and Warehouse Commission, year ending November 30, 1908.

tion and the present value of a road, reserving to themselves any adjustments of these values that might be thought necessary to secure uniformity of taxation."

What is the relative value of the physical property of a new railway and that of a railway, say, twenty-five years old, each having the same net returns from traffic, the one being a duplicate of the other? The right of way value would necessarily be the same, but the replacement value of material and equipment on the older railway would be only 50 per cent of that of the new railways, plus such salvage value as material may have when retired from service. Assuming that, taking into consideration the changes in cost of labor and material entering into the construction, and the reduction in present market value of material on the older road due to wear and tear, the older road is valued at only 90 per cent of that of the new railway, is the older railway to receive on its return from traffic only 90 per cent of the return allowed to the new railway?

The cost of reproduction is a matter of individual opinion. No engineer in estimating on the several important items of construction work for the year will come within 10 per cent of the total aggregate cost. Many of the more important items are frequently underestimated from 25 to 50 per cent. If experienced engineers, knowing the local conditions, cannot estimate the exact cost, how can those without special knowledge be expected to do so? A very good illustration of this may be had by contrasting the original estimates with the ultimate cost of post offices and other public buildings. An especially good illustration, and one known to all readers of the daily press, is that of the Panama Canal. The original estimate of the cost of engineering and construction work was $139,705,-

200, but the present estimate is $297,766,000,[14] and it is probable this cost will be greatly exceeded. In the case of the Panama Canal, large expenditures have been made for engineering in the selection of a route and to determine whether a water level or lock canal was the more desirable. These expenditures should be added to the cost.

In building a railroad, several routes are surveyed to determine the lowest grade that can be secured for a line that can be constructed within the sum on which a fair return may reasonably be anticipated. These surveys are a necessary part of the cost, as otherwise the line secured would not be adapted to economical operation and the increased operating cost would prevent a reasonable return. Existing lines, with prevailing heavy grades, were economically justified at the time of their construction. Such would not have been the case had the traffic originally passing over these lines been equivalent to the present tonnage. The economic development of the country has demanded that the cost of service on such lines be reduced. This has necessitated shortening the lines by the elimination of sharp curves and the continued reduction of grades to such an extent that the increased traffic,secured through increased carrying capacity or decreased cost of operation through increased tonnage per train, has been sufficient to pay a fair return on the additional capital required.

Again assuming, but not admitting, that the cost of reproduction can be approximately ascertained, let us see what its relations would be to (a) the rates charged for handling traffic, or (b) to the capital securities outstanding, or (c) to taxes.

[14] Page 18, President's message to 61st Congress.

## Rates.

The Interstate Commerce Commission, even while advocating valuation, does not contend that, after it has been accomplished, the regulating authority can proceed generally to utilize the results as a basis for rate-making. In the report which the Commission submitted to Congress on December 24, 1908, the following appears:

"It is not essential to this line of thought to express full agreement with the extreme advocates of valuation whose arguments seem to imply that, if the value of the property is known, a reasonable rate can be determined by mathematical calculation. Many other considerations are involved in the problem, notably the manner in which the rate proposed will affect the industrial development of the country."[15]

The foregoing is preceded by the statement that "the amount of profit secured to the investment" may be "one of the most important considerations" in determining rates, but this statement is specifically limited to those cases, exceedingly few in number, "in which the reasonableness of a general level or schedule of rates" is challenged. But as the proposed valuation would throw no light upon the amount of the investment, it would shed none upon even these exceptional cases. The real investment at any particular time is the "fair" value of the property at that time, and it has already been made clear that the proposed valuation would bear no definite relation to this value.

The vast majority of the complaints submitted to the Interstate Commerce Commission challenge only particular rates, or particular groups of rates. Even the definitely ascertained value of the property would have but small utility in such cases. The question in every

[15] Interstate Commerce Commission Report, 1908, pp. 83 and 84.

one of them must be whether, in view of the value of the particular service, the rate fixed by the carrier bears upon that service with disproportionate severity. Professor Adams himself has defined the question in terms which, under the present plan of regulation, leave little, if any, room for the use of the proposed valuation. In an address before the National Convention of Railroad Commissioners, held in April, 1893, Professor Adams said:

"The process of rate-making, according to this idea, would be as follows: Determine, in the first place, the income which a railway corporation actually needs. Determine, in the second place, the business which rightly belongs to the corporation by virtue of its relation to the source and destination of freight. In the third place, classify all freight according to a uniform classification. The process of rate-making would then be to adjust rates to the various classes of freight in such a manner that the required gross income may be secured to the company and the burden of payment rest as lightly as possible on the customers of the railways. The principles which lie at the basis of just railway schedules arise from a study of the theory of taxation. As in taxation payment for the support of government should be in proportion to the ability of citizens, so the contribution of shippers to the fund necessary to meet the legitimate demands of railways should be made from various classes of goods in proportion to their ability to bear the charges. If this theory of rate-making be accepted, or, indeed, any theory which regards the problem from the standpoint of public interest, the determination of rates comes to be a purely statistical problem, or, at least, a problem that calls for decisions that can be given only on the fullest and completest information as to facts."[16] Further in the same paper, Professor Adams gives the following definition of a just rate:

[16] Page 51, Report of Fifth Annual Convention of R. R. Commissioners.

"A just rate does not mean a rate which a particular shipper can pay for particular goods, but rather a rate which, when enforced and maintained, entails in a community just and commendable results. The question involved in this controversy is not simply commercial in character, it is at the same time a question of public policy, and as such, like all questions of a political character, demands the fullest and completest knowledge respecting it."[17]

The foregoing extracts express an idea very similar to that conveyed in the annual report of the Commission for the year 1895, when the Commission said:

"To some extent the principles upon which taxation rests must be allowed in fixing a just rate; to some extent the result of the rate upon the development of industries must be taken into the account in all decisions which the Commission is called upon to make; to some extent every question of transportation involves moral and social considerations, so that a just rate can not be determined independently of the theory of social progress."[18]

We see that even in the suggestions of Professor Adams and of the Commission this question of cost of reproduction occupies but a very small place in the process of determining the reasonableness of a rate. There is the classification of commodities (what *some* of the traffic will bear), the relative charges for short and long haul, and other elements of cost of service, the effect of competition, etc. Thus again do we realize the importance of determining the manner in which the Commission will use the cost of reproduction, if ascertained.

Passing over the question whether regulation may properly impose such a limitation upon gross receipts, it must be noted that the ultimate authority, the Supreme

[17] Page 52.

[18] Interstate Commerce Commission Report, 1895, P. 59.

Court of the United States, has declared that the minimum income that must be permitted is to have reference to the "fair value" of the property. As it is not proposed to ascertain the "fair value", it is evident that the results of the inquiry would not even furnish a basis for calculating the minimum income which regulation must allow.

Perhaps it may somewhat illuminate the discussion to suggest here certain hypothetical questions. Bearing in mind that the power to regulate railway charges rests wholly upon the fact that the railway is a common carrier, and extends no further than the power to control the charges of any common carrier, let it be supposed that an individual operating an express wagon upon a public highway, as a common carrier, has invested in his business the sum of $5000, and that he performs, within a particular period, five hundred services at a uniform rate of $1 per service, and at an operating expense of 50 per cent of his gross receipts, thus leaving $250, or 5 per cent for the return to capital. Assuming the rate of $1 to be reasonable under these conditions, let us inquire:—

1. Does the rate become unreasonable if the introduction of operating economies reduces the operating ratio to 25 per cent, leaving 7½ per cent for return to capital?

2. Does the rate become unreasonable if, with no increase in capital, the number of services and the operating expenses are both doubled, with the result that capital earns 10 per cent?

3. Upon the additional assumption that one-half of the capital was originally borrowed at 5 per cent, does the rate become unreasonable if the loan is renewed at 3 per cent, leaving 7 per cent upon the portion of capital actually supplied by the individual conducting the business?

If any one is disposed to answer the foregoing ques-

tions, or any of them, in the affirmative, he should do so with a full understanding that his answer commits him to the principle that those who engage in public service industries are not entitled to the rewards that naturally spring from superior management. If the rewards of such management are to be confiscated, those who are capable of it would do well to devote their capacity and industry to other lines of activity. If this doctrine should be established, there would be little basis for the hope of further improvement in the methods of public transportation. Perhaps some one will suggest that the proper answer is that the rates do become unreasonable, but that the required reduction should not absorb *all* the carrier's gain in either instance. This conclusion would, however, approve the confiscation of part of the results of superior management, and involves those who adopt it in the further difficulty that it requires a determination by some government authority of the maximum reward to be permitted. Even under the very simple conditions of our hypothetical questions the arbitrary and inexact nature of such a determination is apparent. With the immensely complex and difficult organization of a great railway, it is evident that such a method could not be applied with any degree of accuracy, and that the effort to enforce it must tend to deaden the industry.

Referring in its opinion, in the case of Marten vs. The Louisville and Nashville Railway,[19] to the decision of the Supreme Court in Smyth vs. Ames, and especially to the statement in that case as to the use of "fair value" as a means of testing the reasonableness of rates, the Commission said:

"It is even difficult to say what constitutes a reasonable rate, and more difficult to give in detail the reasons that

[19] 9 I. C. C. Rep. 581.

lead to that conclusion. Although the Supreme Court of the United States has furnished certain rules by which to test the reasonableness of transportation charges, and although this Commission has endeavored to apply these rules, yet, whenever it has interrogated railway officials as to whether or not they are governed by them in making rate schedules, they have invariably answered in the negative and said that to do so would be impracticable."

The truth is, as doubtless occurred to the writer of the foregoing opinion, that neither the industries of the country aside from the railways, nor the railways themselves, could exist under rates calculated from a "valuation" upon any such basis as that proposed. No method of calculating rates from "valuation", as the term is being used in this discussion, could be devised that would result in rates under which either the railways or the industries they serve could continue to exist. It is not meant by this that there is no case in which such a method could be applied without complete disaster, but it is asserted that the general adoption of such a method of rate-making is impracticable. Although prices and rates in every business not effectively monopolized tend toward the cost of production, there is no business—either wholly private or quasi-public—in which prices or rates have or could have a fixed and arbitrary relation to cost. The retail merchant may endeavor to add a uniform percentage to the wholesale price of the goods which he sells, but this desire always yields in the face of competitive conditions, for the price must always be one at which the goods will sell. Similarly the railway is obliged to sell its wares, and, while there are certain elements in their cost of production which it cannot ignore, the amount of its investment is not among them. Under some conditions rates must be made which do not

produce what on every other consideration would amount to a "fair return upon the fair value of the property."

The phrase "what the traffic will bear" is generally misconstrued to mean "all that the traffic will bear." What it does mean is, "all that some of the traffic will bear." It can be safely stated that "all the traffic will bear" is charged only in cases where it is found necessary to make reductions from the normal rate in order to permit the traffic to move at all, and that the charge of "all the traffic will bear" is not made for the purpose of securing an excessive rate for the service performed.

It is a well recognized rule, subject to few exceptions, that rates must be equal upon all routes connecting the same points, although it is quite impossible that the value of the property, the original cost, or the reproduction cost of the property pertaining to the different lines should be the same. The exceptions to the rule tend to support this contention, for they arise when a less advantageous line can obtain a satisfactory share of the traffic only by making a lower rate; and the most common disadvantage supporting such a differential relation is that one line operates via a circuitous route—a condition implying, along with excessive mileage, higher cost. Again, just as the merchant would become bankrupt if he allowed his capital to remain invested in goods which he refused to sell because the market price had gone below the original cost, so a railway constructed under conditions involving a higher cost than those governing the construction of a newer rival, would have no traffic if it insisted upon keeping rates at a level determined by the amount of its original investment.

Economic efficiency consists in the ability to produce something at a cost which will permit it to be sold, and actually to sell it, at a price that leaves a profit to both

the seller and the purchaser. Rates for railway service must be fixed at such a level that the service obtained by the shipper is worth to him something more than he is asked to pay for it. Efficient railway management consists in being able to perform the greatest possible number of services at a cost to the railway somewhat lower than the rates charged. It is this margin between cost of producing transportation and the rates obtained which determines the value of the railway property, and it is a dangerous delusion which assumes that this relationship of cause and effect can be reversed.

## Capitalization.

Discussion of the question of capitalization will be somewhat clarified if we bear in mind the difference between capitalization and capital securities. Too often the terms are used as synonyms. During recent years capital stock of some of the leading companies has sold at a considerable advance over its par value. Let us say $150 per share is obtained for stock having a par value of $100. One hundred and fifty dollars will then represent the capitalization, while $100 will represent the capital securities. In like manner any surplus earnings which have not been paid to the stockholders as dividends, or for which they have not received new capital stock, will not be reflected in the capital securities of the company, although continuing in the capital account. It is also erroneous to assume that capitalization per mile of road or per mile of track can be ascertained by dividing the total miles of road or of track respectively into the total par value of securities outstanding. The proceeds from the sale of a considerable portion of these securities have been used in the purchase or development of coal lands, timber lands, hotels, or other property, which do not

enter into the cost of the road. The net income of railway companies represents not only the net income from the railway property, but also the income from the securities held, and from coal and timber lands, hotels, and other property not included in the statement of operations of the railway.

Nor will the value of securities correspond with the cost of replacement where such securities were issued for the purchase of a going concern bought at its fair value. The price paid may be more or less than that element of value, "the then cost of replacement."

While the transportation cost is approximately 50 per cent of the total operating expenses, and these expenses are directly affected by the train load, it does not necessarily follow that the earnings applicable to dividends are increased in proportion as the train load increases. This is only true when additional capital is not required to secure such results, otherwise part or all of the saving is required to meet the additional fixed charges. The desirability of increasing the train load depends upon whether the resulting saving exceeds the cost of the new capital required. It is to realize upon these savings that reductions of grades, the construction of additional main and passing tracks, of terminal and other facilities, and increased investments in rolling stock of greater capacity are undertaken.

Note the following statistics of railways reporting to the Interstate Commerce Commission:

| | 1906 | 1896 | Increase. | |
|---|---|---|---|---|
| | | | Amount | Per Ct. |
| First track—miles | 222,340.30 | 181,982.64 | 40,357.66 | 22.18 |
| 2d, 3d, & 4th tracks—m. | 20,981.98 | 12,429.76 | 8,542.22 | 68.67 |
| Yard trk. & sidings—m. | 73,760.91 | 44,717.73 | 2[illegible],043.18 | 6[illegible].05 |
| Total miles | 317,083.19 | 239,140.13 | 77,943.06 | 32.59 |
| Locomotives—number | 51,672 | 35,950 | 15,722 | 43.73 |
| Passenger cars—number | 42,262 | 33,003 | 9,259 | 28.06 |
| Freight cars—number | 1,837,914 | 1,221,887 | 616,027 | 50.42 |
| Passenger Miles | 25,167,240,831 | 13,049,007,233 | 12,118,233,598 | 92.87 |
| Ton Miles | 215,877,551,241 | 95,328,360,278 | 120,549,190,963 | 126.46 |

Inasmuch as the percentage of increased second, third, and fourth tracks, of yard tracks and sidings, also of rolling stock, is greater (much greater) than the increased percentage of the mileage of first track, it cannot be denied that the cost per mile of road has increased, especially when we recall that reductions in grade and changes in alignment, installation of block signals, increased weight of rail, heavier bridges, and other betterments, are not reflected in the mileage; that the cost per car or locomotive purchased in 1906 is 50 to 60 per cent above the cost per car or locomotive purchased in 1896. It would, therefore, be erroneous to conclude that a wrong has been committed simply because the cost of road per mile, or the amount of securities per mile outstanding in 1906, was greater than in the year 1896.

In the past, the policy of railway managements has been to make additions and betterments when the anticipated return was sufficient to pay the increased carrying charges, even if such return was not likely to be sufficient immediately to reimburse the stockholders for the old property withdrawn from service, the cost of which would not be reflected by any inventory valuation. Nor would that portion of the capital securities issued for material have its equivalent in an inventory valuation which included the material at less than its cost price; that is, where an appraisal of property is taken before the property is placed on a self-sustaining basis—a difference which can properly be regarded as part of the cost of securing a going concern.

There are doubtless other elements affecting the relation between par value of securities outstanding and the "cost of reproduction." All of them should receive full consideration.

The system of accounts promulgated by the Interstate

Commerce Commission makes it impossible that cost of property and par of outstanding securities should be equal. They expressly forbid the capitalization of many construction items amounting to $200 or less. Some states have recently ordered the equipment of locomotives with electric headlights. While one locomotive might be so equipped at a cost of approximately $200, to equip five hundred would amount to $10,000. There are numerous extensions of existing industrial tracks and additions and betterments to existing structures which amount to less than $200 for any one item, but, in the aggregate, constitute a large expenditure.

That system establishes *depreciation* accounts but makes no provision for *appreciation*. It provides for the arbitrary withdrawal from the accounts of the cost of property prematurely withdrawn from service through additions and betterments, undertaken for purposes of improving the service or more economical operation, and does this without regard to whether capital has been reimbursed for its investment. It does not encourage economical operation but does offer a premium to any road which increases the cost of property per dollar of revenue received; that is, it encourages a result directly contrary to all economic principles. It does not encourage competition, but does make the strong roads stronger and the weak roads weaker. This system of accounts is purely academic, and fails to recognize the basis of past practices or present conditions.

It requires the carriers to pay out of earnings many items which should be capitalized. For such of the items as represent property "abandoned to make way for providing the public with better facilities", the statistician of the Commission admits that there is merit in the

argument of the stockholder that the cost of progress should be capitalized.[20] Notwithstanding this, the Commission ignored the claims of the stockholder and did so against the unanimous recommendation of the railway accounting officers, and without granting any formal public hearing. Charging these items to ex-

[20] "With regard to Additions and Betterments the situation is somewhat different. The general facts relative to this classification are well known, and the views of carriers respecting them have been compiled. The point of difficulty—that is, the point which makes this classification of such paramount importance—pertains to the treatment of abandoned property. Shall the value of abandoned property be kept in the capital accounts, or shall it be charged off? If charged off, shall it be charged to operating expenses or to profit and loss? If charged to operating expenses or to profit and loss, shall it be by a single entry or prorated through a series of months or term of years? If prorated, what principle should govern the determination of the period to be covered by such prorating?

This is the most serious of the technical questions yet raised in the development of a uniform system of accounts, and a point in which the public as well as the carriers have a vital interest. On the part of the public, the argument is strong in support of the proposition that the Balance Sheet statement of 'Cost of Property' should cover only that property actually used in rendering the service of transportation, and that abandoned property should therefore be taken out of the accounts; but the argument of the stockholder also has merit, which is that, inasmuch as the property abandoned was abandoned to make way for providing the public with better facilities (for it must be held in mind that the question at issue arises in connection with additions and betterments), and further, inasmuch as the first investment was necessary in order that the second investment might be made, it is scarcely just to require the stockholder to sustain the entire loss. It seemed appropriate to state this question, not for the purpose of discussion, but to call atention to the fact that the work of this Division in the development of a system of standard accounts for railways has reached a point where further progress requires a definite expression of policy on the part of the Commission. A sense of equity and an appreciation of business conditions rather than legal or accounting technicalities would seem to be the element out of which such a policy should be constructed." (Statistics of Railways in the United States, 1907, Interstate Commerce Commission.)

penses correspondingly reduces the net returns from the property.

A good illustration is the question of increasing the tonnage capacity of the track. This can be done either by reducing the grades or by building additional main tracks. The reduction of grades necessarily involves some changes of alignment and, therefore, the abandonment of portions of the old roadbed. To secure the same increase in carrying capacity, the cost of the second track and the cost of reducing grades may be approximately the same. If the grades are reduced, a large percentage of the cost must be charged to operating expenses. If additional main tracks are constructed, all the cost must be capitalized. By reducing the grades, the capacity of the line can be doubled and the business handled with fewer locomotives and fewer engine and train crews. No such reductions can be obtained through the construction of additional main tracks.

The system of accounts promulgated by the Commission places a premium on the less economical method. This impairs the ability of the carriers to pay fair wages to employees, to pay a reasonable return to investors, or to secure the lowest rates for shippers.

The shippers of the past derived no benefit from these changes, nor would it be possible to collect the cost from them. The benefit to shippers through improved service begins when such facilities are installed, and continues indefinitely. Like the Panama Canal, the charge should, therefore, be shared by future generations rather than requiring the present generation to pay the entire cost.

While the public believes that this system secures uniform and accurate results, the opposite is true, and theoretical book entries are substituted for entries of actual transactions, which theoretical book entries, raised or

lowered at will, can give any result desired, regardless of the facts. We have but to understand the Commission's system of accounting to realize the necessity of knowing not only the elements which will be permitted to enter into cost of reproduction, but also the uses to be made of such cost, before committing ourselves to any general scheme of valuation.

The suggested future use of the present cost of reproduction without a reinventory, but by a process of addition and subtraction, is equivalent to saying that the present cost of reproduction can be ascertained by applying a similar process of addition and subtraction to the original cost of the property. Neither that plan nor the system of accounts promulgated by the Commission gives due consideration to the effect on capital caused by the premature withdrawal of facilities in the installation of betterments for increasing the productive capacity of the plant. They provide for the systematic taking away from the investor of a portion of the capital which he has invested, without in any way securing to him a commensurate return. In no instance do they provide for appreciation in either the selling price of real estate or in other elements entering into the value of the railway as a going concern. What could make the risk to capital more extensive?

The ultimate plan proposed by the Commission contemplates a continuance of all actual liabilities the same as heretofore, and some theoretical liabilities (or "accountabilities", as they are called by some who recognize the objection to terming them "liabilities").

Actual figures will not be continued on the asset side of the balance sheet but some theoretical prices and figures determined by a "rule of thumb." The only actual cost figures to be continued on the asset side will

relate to non-physical property. Thus we see that, although the Interstate Commerce Act authorized the Commission to prescribe a system of accounts that only contemplated a *record of the acts of the carrier,* they have attempted *a system of control,* which would permit them to substitute fictitious for actual transactions.

The Commission has had no duty to perform which has been or is likely to become more important than the preparation of a system of accounts for the carriers. This work was delegated to others. While some carriers were consulted by the statistician, those to whom the work was delegated made a number of recommendations to the Commission which the carriers believed would seriously affect their ability to interest capital or improve their property to meet the increasing demands of commerce. These recommendations were adopted by the Commission against the protest of the carriers, and they most emphatically denied the request of the carriers that a public hearing be had before the promulgation of any system of accounts.

Professor Adams valued the Michigan Central Railroad in 1900 and again in 1902, and in the latter year increased the valuation to the extent of $20,000,000 by the simple device of a change of one per cent in the interest rate assumed. Professor Adams valued the franchises at $18,259,880, while another economist of equal distinction, Professor E. R. Johnson of the University of Pennsylvania and a former Isthmian Canal Commissioner, computed the value of the same franchises as $2,327,000. The methods used were identical except as to the interest rate assumed to be applicable. No one has yet suggested that the owners of the property would be justified in thus attempting to fool either themselves or the public. Is it not more dangerous to

place this power with a political body subject to frequent change in its membership, which, in its past work and public utterances, has claimed to represent the public exclusive of the carriers, while admitting that such representation interferes with its ability to be impartial? Even while urging an official valuation in their report to Congress of December 29, 1909, the Commission refer to testimony offered by certain railways and declare that until they are permitted to make a valuation:

"There is no way by which the government can properly meet this testimony."[21]

Could there be a plainer statement that the proposed valuation is to be *ex parte* and adverse to the carriers? Yet the same report urges that the "value" so "established" "shall be binding upon the courts and the Commission."[22]

## Taxes.

We have mentioned some elements that cause differences between the cost of reproduction and the capital securities outstanding. Such differences must also exist between valuation for taxation and the par value of securities outstanding, or between the valuation for taxation and the cost of replacement, so long as there is continued the present method of assessing property for taxation.

Apparently Professor Adams concedes that, under present conditions, the cost of replacement is useless for taxation purposes. A new theory of taxation with a new name is, therefore, suggested, which, while contemplating a minimum investment return to the weak line, would deprive a stronger line of anything over such an

[21] Page 6.

[22] Ibid, page 6.

investment return, thus taking away all reward for effective management, superior economics, and improved facilities and methods. Any sum over such maximum investment return is not to go to a reduction in the rates, but is to be confiscated under the guise of taxation.

Professor Adams maintains that we must follow the English practice of the fifteenth century, when the corporation was an arm of the state.

### Effect on Capital, Labor, and the Users of Transportation.

While asserting "that the public is in partnership in the public service industries", the scheme fails to recognize that all partners are expected to bring something of value into the partnership and share proportionately in both losses and profits. Professor Adams's scheme, if carried out,would not only cause the investor in railways to stand the loss from any possible reduction in the estimated cost of replacement or in the operation of his plant, but would give to the public any profits that might arise over and above an investment return. It does not, however, contemplate that the users of transportation shall share with the railway investors any profits that may arise in their business over and above an investment return.

If the plan contemplates that both the minimum and maximum return for all lines must be the investment return, then the government must arbitrarily raise the rate for all lines, in order to secure such return to the weaker lines; and these rates must be subject to such modifications as are made necessary by changes in the volume of traffic and by changing prices in material. The rates must at all times be sufficient to secure fair wages for employees. These conditions would produce

unstable rates, the disadvantage of which, in connection with commercial contracts involving prices, is too well understood to require discussion here.

Has capital assumed no risk, and has its reward been unduly high? The processes of liquidation through which many roads have passed answer the first part of this question. The average return today on securities outstanding (which members of the Interstate Commerce Commission, the President of the United States, and other persons of authority have publicly stated undoubtedly represent approximately the present value of the properties) is not over 4 per cent. Is this an attractive rate for capital, and can the interest of capital be had by limiting its return to the investment return of yesterday or today when we consider the continued diminished purchasing power of a dollar? The amount of coal purchasable for one dollar in 1907, as compared with 1897, decreased approximately 30 per cent for bituminous and 21.43 per cent for anthracite, and wholesale prices of other necessaries of life show advances averaging nearly 45 per cent. Reversing the proposition, the selling prices of products of mining, agriculture, and manufacturing show an increased power to purchase railway freight service equivalent to 47.24 per cent for fuel and lighting products, 69.19 per cent for farm products, and an average of 51.97 per cent for all products.

A comparison of rates in the United States with those of any other country will show that American railways have not been unduly exacting, and it is well known that the tendency of rates for a series of years in this country has been downward. If due weight be given to the decreased purchasing power of the money in which charges are paid, it will appear that at no time has this tendency been interrupted. Rates of pay of employees have great-

ly increased and must continue upward as long as cost of living increases. The users of transportation and of labor have, therefore, shared in the results obtained from economies in operation, which results have only been secured through the risk taken on the part of capital.

Money is only a medium of exchange. The investor is not interested in the money return from his investment, but in the result to be obtained with that money, that is, in its purchasing power. With wheat at 50 cents per bushel, the return on a $1000 5 per cent bond, selling at par, would purchase one hundred bushels, while with wheat at $1 per bushel, it would purchase only fifty bushels. With the cost of living continually advancing, the proposed limiting of income from investments in railroads must necessarily result in increased burdens upon those dependent entirely upon such income for support. It must make new investment in these securities unattractive so long as capital in other branches of commerce is permitted greater returns with equal or less risk.

The real situation now confronting the country was set forth in the reports of the Interstate Commerce Commission for the years 1906 and 1907, in which they called attention to the fact "that the facilities of the carriers have not kept pace with the commercial growth of the country."[23]

[23] "The extraordinary prosperity which everywhere abounds, with the high prices obtainable for all classes of commodities, has so stimulated production as to yield a volume of transportation business which far exceeds in the aggregate the carrying capacity of the railroads. In a word, the development of private industry has, of late, been much more rapid than the increase of railway equipment. . . . .

"In some cases it is simply a lack of cars, in others insufficient tracks and motive power, in still others wholly inadequate freight yards and terminal facilities.

"Broadly speaking it does not appear that the existing congestion, amounting in many cases to a virtual paralysis of business, results

Is it not clear that this situation results from the unfair criticism of railways and that real or threatened injustice in dealing with them has caused investments in their securities to cease to be attractive to capital? This being true, the need of today is not directly to stimulate commerce for the purpose of assisting the railways, but to encourage capital sufficiently to enable the railways at least to meet the just demands of commerce and thus to encourage increased production.

The Interstate Commerce Commission, or at least a

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so much from insufficient car capacity . . . as from the lack of adequate tracks and motive power, delays in loading and unloading, and terminals far too small for current requirements . . . .

"A situation of such gravity calls for every remedy that can be usefully applied." (Interstate Commerce Commission Report, 1906, P. 17.)

"The general question of the provision of adequate transportation facilities unquestionably merits serious consideration by Congress. The whole problem involving insufficient car and track capacity, congested terminals, slow train movement and other incidents may be said to be due to the fact that the facilities of the carriers have not kept pace with the commercial growth of the country.

"If business undertakings proportionately increase during future years, the railroads of the country must add to their tracks, cars, and other facilities to an extent difficult to estimate. The ability of the carriers to transport traffic measures the profitable production of this vast country, with its ninety millions of people, abundant capital, and practically unlimited resources. Manifestly it is an economic waste for the farm, the mine, or the factory to put labor and capital into the production of commodities which cannot be transported to market with reasonable dispatch. If the present output cannot in many instances be transported except after ruinous delays, it is not reasonable to presume that capital will readily seek investment in new undertakings. It may conservatively be stated that the inadequacy of transportation facilities is little less than alarming; that its continution may place an arbitrary limit upon the future productivity of the land; and that the solution of the difficult financial and physical problems involved is worthy of the most earnest thought and effort of all who believe in the full development of our country and the largest opportunity for its people." (Interstate Commerce Commission Annual Report, 1907, pp. 8 and 9.)

distinguished member of it, has already complained that its functions, combining as they do duties of legislative, executive, and judicial nature, are too complicated and inconsistent to be wisely vested in a single tribunal. This embarrassment has been recognized, and remarked upon also, in executive communications to Congress and elsewhere. Further, the Commission states in its latest report that it has already so much work upon its hands that much of it must needs be delegated to subordinate agencies; and it is certain that if the immense labor of making any sort of valuation of all public service utilities were imposed upon it, it would not be performed by the Commission itself, but by some other persons whom it would employ for the purpose. They did delegate to others so important a matter as a system of accounts for carriers.

Apparently the Commission did not object to undertaking an estimate of the "cost of replacement", but they did request of Congress that they be not asked to determine the "fair value", thus raising a question as to their ability to use for any specific purpose such "cost of replacement", when ascertained. If it were to be admitted that some kind of valuation of public service utilities should be made, it is not unnatural to suggest that the Commission should be spared further confusion of diverse duties by vesting the power to make such valuation in some other agency, whether a committee of Congress or a special commission which would be able to give its undivided attention to that duty, which would be found to be of sufficient magnitude to enlist the largest capacity of recognized experts.

It should not be inferred that the railways object to having a valuation placed upon their properties. In effect such valuations are daily attempted with greater or less success by subscribers to new issues of securities, and

even by those who invest largely in securities heretofore issued. There is, however, serious objection to an incomplete and misleading valuation, bearing the stamp and carrying the weight of governmental sanction, which can be of no practical advantage to the government, the public, or the railways; but may easily injure the public and the railways by disturbing the confidence of the former and hampering the activities of the latter. It seems very clear that such a valuation as is proposed would be wholly useless to the government for any practical purpose, because it would omit so many factors essential to any fair appraisement of the worth of the enterprises as going concerns. The only purposes suggested are: (a) for rate-making; (b) for control of security issues; (c) for taxation.

(a) Unless the Supreme Court overrules its well-considered decisions herein referred to, such partial valuation cannot possibly form the basis of determination of any rate or rates, general or special.

(b) No such control is as yet vested in the Commission, nor can it be under the federal constitution. There can, therefore, be no advantage in securing such a valuation to facilitate the performance of a function which does not now and probably never will exist.

(c) It is assumed that the taxation referred to is federal taxation, with regard to which it may be briefly said: (1) A partial and unequal valuation could not be the basis of a fair tax. (2) Congress has already elected to tax all corporations, including railways, upon their net profits; to which a physical valuation can have no conceivable relation. (3) If in future other methods of taxation should be proposed, to which any valuation is relevant, it will then be soon enough to provide for a valuation which will harmonize with the system under consideration.

# OFFICIAL VALUATIONS OF PRIVATE PROPERTY

FREDERICK W. WHITRIDGE

Some years ago a very rich man who proposed to found a great institution of learning in one of the far western cities went to Cambridge to see what was being done at Harvard. He passed a day or two looking at its buildings, libraries, and museums, and inquiring into the courses of study and the work carried on. At the end of that time he turned to those who were showing him about, and said: "Well, gentlemen, what is your whole plant worth?" They looked blank, and the millionaire reiterated: "What is the value of it—how much did it all cost?" The notion that Harvard University, the product of two centuries of time and of the lives and labors of thousands of good men, could be valued in money was strange; but the millionaire was insistent upon an answer, and one official finally said: "I suppose it cost perhaps so and so many millions;" and the plutocrat turned to his wife, who happened to be with him, and said: "Well, I guess we can do better than that," and went away quite confident that it was within his power, by the mere expenditure of money, to at once produce an institution more valuable than Harvard University.

The Harvard representatives at this conversation could not have been more aghast at the millionaire's question than I was when, some months ago, I received from the Public Service Commission of this district notice that they had undertaken the valuation of the property, tangible and intangible, of the street railways of this city, including one of which I happen to be the custodian.

I asked how it was proposed to make the valuation and what was the purpose for which it was to be made. In various forms I repeated these questions for more than a year, without any answer, until one of the commissioners, perhaps inadvertently, said that the purpose of the commission was, in brief, "to secure reliable information as to the value of the physical properties of the company for the purpose of being in possession of the facts necessary or important for its discharge of the duties devolving upon it in connection with issues of securities, passenger rates, etc.," and that I must be aware of it. That statement, if you please, being made with reference to a company of which all the securities had already been issued, and to a railroad and a community where the most widely known and universally accepted fact in respect to street service is that the fare of every passenger is fixed at five cents! This statement did not enlighten me, and for a long time I could not conceive what the commission was driving at. I have, however, now discovered what I suppose the most of you knew long ago—that the notion of a valuation of public service properties originated in the State of Wisconsin, although it was first attempted to be applied in Texas, and that in Wisconsin there is a statute which provides for such valuation, primarily for the purpose of enabling the state to fix rates on the steam railroads which would be more acceptable to the shippers; and in a recent address by Mr. Roemer, a member of the Wisconsin Commission, I find the whole philosophy of a state valuation of public utilities expounded.

The New York Commission for this district has apparently swallowed the Wisconsin doctrine whole, and is undertaking to apply it in a state where the Wisconsin statutes do not run. Mr. Roemer says that the duty of

the valuation imposed upon the commission is the gravest and most important of all its functions, and asserts that "the value of every security of a public service corporation in this state will be determined and perhaps irrevocably fixed by the appraisal made by the commission of such corporation, upon the credit of which such security will be issued. There can be no escape from this conclusion. Fair and reasonable as such appraisal may be, it will signify to the world that, in the future, public utilities in this state will cease to be a subject for speculative investment. It will also indicate that which is most important, to wit, that actual bona fide investments in such concerns, when providently made, will be secure under state supervision, and the adequacy of the security will be maintained by strict enforcement of the law." These views I shall not undertake to discuss. Anybody who holds them is as much beyond the reach of any argument at my command as were those persons who some years ago believed that the relative value of two metals could be fixed by act of Congress. Mr. Roemer, however, goes on, as I understand him, to point out that the method of valuation—as if there were no other—is to have the engineering staff determine the "cost of reproduction." He says: "The engineering staff endeavors to determine as accurately as possible the true 'cost of reproduction' of each item of physical property included in the inventory. All available evidence is carefully weighed, with a definite purpose of arriving at a 'middle-ground' decision on the value of each detail of the property, both as to the 'cost new' and the depreciated or 'present value'. Throughout its work the attitude of the staff is carefully guarded against bias of any kind, with the intention that the service rendered to the commission shall be identical in kind and quality with

that of a technical expert chosen independently by the court to give expert advice or opinions in technical matters."

But Mr. Roemer omits to notice that besides the "cost of reproduction" there are other measures of value, such as market price, original cost, the rental value, all quite as efficient as the cost of reproduction. The salient fact about all but one of these methods of valuation is that, after all, they rest upon the testimony of experts. It is all very well to talk of a valuation by the state. That has an august sound, but when we come to examine the statement it shrinks, so that your state valuation is only the unsifted judgment or guess of one or more individual experts.

Now, with every respect in the world for science of every kind, and for those who are expert in it, I cannot but recall a remark made to me by Professor Huxley, of whom I was asking an expert opinion for our government on a subject which he had studied profoundly, and he said to me: "My dear Whitridge, there are, you know, three kinds of liars—liars, damned liars, and experts."

I remember also, in my early days at the bar, I was directed to prepare a brief, based wholly upon expert opinions, to show that the Brooklyn Bridge would fall down, and in that brief I *proved* that the molecular rearrangement caused by the impact of the heavy traffic on the steel of which the bridge was constructed would result in a disintegration of that metal and the collapse of the bridge. If the theories of molecular action which then prevailed still hold true, that bridge may fall down at any moment, but fortunately I did not fix a date for the catastrophe.

I remember again that when Mr. Edison first announced his project for lighting this city by electricity, a

then electrical expert who was *facile princeps* in his line, said to me in the Western Union office: "Why, if Tom Edison can do what he says he can do, he needs a copper conductor a foot in diameter, which would be heated red-hot."

I am personally quite unable, therefore, to look upon any valuation of anything with the complacency with which Mr. Roemer and his school regard a valuation of public utilities which rests entirely upon the judgment of experts. Assuming, however, that experts are to be depended upon absolutely, and that it is possible for a public body, speaking in the name of the state, to be willing to shelter themselves behind expert opinion, it is quite evident, from the merest enumeration of the methods of valuation, that the conception of value is a very complex one, and it is easy to point out the inadequacy of any particular abstract method of reaching it.

The state has thus far generally undertaken to make a valuation of private property only for the purposes of various kinds of taxation, and it is important to note how it is made. In the first place, take the valuation of land, of real estate generally. In this country and in others where land is freely sold, valuations not only for the purposes of taxation, but for the purposes of sale, are very common; but such valuations are, so far as I know, invariably made with reference to the supposed present or prospective market value. Even here it is a common experience to find that experts with a full knowledge of the sales in the vicinity of a particular piece of property will differ widely in their judgment of its value. I recall an instance where within a year I asked three of our leading real estate firms to appraise a piece of property in the center of this city, which was held at about $500,000, and those three firms differed from each other in their esti-

mates of the value of that property by as much as $150,000.

In our own country and in France, Switzerland, and Germany, the governmental valuation of land is nevertheless common for various purposes, because, as I believe, there is a possibility of estimating its market value; but in parts of England and Scotland or wherever land is rigidly held, the case is different. The burning question in the proposed Budget, which has just thrown Great Britain into a general election, is the valuation of land. Five hundred different valuation offices are proposed to be created, and the act provides for twelve or thirteen different kinds of valuation, including "increment value, site value, principal value, gross value, full site value, total value, assessable site value, value for agricultural purposes, original site value, and original total value." In the act some of these expressions are defined, some are not. One of them is defined and never used again in any other part of the bill, and "site value" in one clause has a different meaning from "site value" in two other clauses.

As an illustration of the difficulty of valuing land under conditions different from our own, I recall a conversation which occurred last summer, when an active English politician, as modern as anybody in Wisconsin, who was shooting with me on a Scotch moor, turned around and, looking over the five thousand acres comprised in it, asked: "What is the value of this land per acre?" The members of the party could not agree, and on reference subsequently to the nearest solicitor and land agent, he answered: "Well, it is difficult to fix the value of that land, because there have been only three sales of property in this valley for at least two hundred and fifty years."

In the second place, take the valuation of personal property, for the purpose of transfer, inheritance, and direct personal property taxes, or the collection of duties. I believe that valuation for the purposes of the first three of these taxes is invaribly fixed by reference to the market price ascertained from the dealers, or published quotations; and for the purpose of customs duties the valuation is almost invariably fixed by the cost price, although in the case of personal effects where the cost price obviously no longer represents present value, our government makes itself ridiculous at least one million times a year—or would do so if it complied with the law—in the endeavor to make an official valuation of such effects on the dock or in the public stores.

In the third place, take the state valuation of intangibles like franchises and good-will—for if competition in public utilities can be conceived of under the Wisconsin doctrine, good-will must be recognized as an element of value—and it appears plain that the attempt to make such valuations of franchises for the purposes of taxation has resulted in this state—and I know nothing of it elsewhere—in nothing short of a monstrous scandal. We have a State Board of three persons whose sole duty it is to appraise franchises for taxation, which has been at work for ten years. The appraisals by this board of the street railway franchises in this city have been in litigation for nine of these years. The valuations have been reduced by the courts about 50 per cent. The board has gone gallantly on making its appraisals year after year, as if the courts had not spoken, and the courts will doubtless continue to perform their appointed task of correcting those appraisals. The theory on which this board of valuers proceeds, I do not know, because they have not announced it, but I know of one instance in

which the value of the franchise of a railroad was appraised by it as $40,000. Just after that appraisal was made the railroad, franchise, cars, roadbed, and all appurtenances sold at auction for $500. The board of appraisers was furnished with an affidavit of the sale at that price, and a copy of the decree confirming it, and they thereupon reduced the value of the franchise, not to nothing, but from $40,000 to $20,000. The labors of this particular body of state functionaries, instead of fixing values irrevocably, as Mr. Roemer dreams the state will do, have only opened a vista of litigation, apparently as long before as it is behind.

All the cases I have so far touched are comparatively simple, but when we come to the valuation of a public utility containing so many different elements as a street railway, an electric light, power, or water plant, the problem is vastly complicated, and it is not surprising that the Wisconsin philosophers have frankly "funked" the whole thing and sought shelter for themselves behind the experts, and those gentlemen have in turn taken the line of least resistance, and say the value of a public utility is what it would cost to reproduce it. Is it? Is it?

If all experts agreed there would be less difficulty in accepting that measure of value, but I see no reason to suppose that experts in the employ of the state are any more nearly infallible than the experts in the employ of the great contractors; and the merest tyro in affairs knows that if bids were asked for the construction of a large public utility today, the best contractors you could find would vary from 10 to 50 per cent in their bids; and in this city I doubt if you could get any bid except for a percentage on cost. Nor is this remarkable in respect to railways, for the actual cost of a mile of underground electric trolley has varied from $64,000 in Washington to about $1,000,000 in New York.

Let us suppose, however, that the present cost of reproduction can be got at; it would obviously be unjust, either to the investors in the enterprise or to the public, unless it could be shown that the march of science had been stayed, and the prices of materials and the cost of labor had been as "irrevocably" fixed as they are in Mr. Roemer's vision of the world that is to be, and had not, therefore, changed since the date of production. The cost of reproduction, moreover, takes no cognizance of obsolete portions of a plant which contributed to its earning capacity and therefore, as I contend, to its present value. The Third Avenue Railway, for instance, was a horse railroad, then it was a cable railroad, now it is an electric railroad, and its security-holders paid their money to construct those roads. The first two served their purpose and have ceased to exist. The Western Union has, I am informed, several millions of bonds outstanding which were issued for the money wherewith to lay cables, some of which have been lost in the primeval ooze at the bottom of the sea.

Now, if the cost of reproduction is the measure of the value of a property, and the aggregate of its securities is to be contained within that valuation, I suppose it must be a corollary of that proposition that the five millions of bonds issued by the Third Avenue for its cable plant and the other millions of Western Union bonds issued for its extinct cable should be surrendered by their owners, and perhaps filed with the statisticians of the Public Service Commission.

Finally, if we suppose that all the proposed valuations have been satisfactorily made, we must also suppose that civilized society has crystallized, as Mr. Roemer with his irrevocability would have us believe, or Mr. Bellamy in his romance long ago imagined. If we

do not so suppose, it must be conceded that the expiration of valuable patents, a decrease in population, bad times, increased prices of commodities, or competition which might lead to the building of a new public utility alongside of an old one, may entirely alter the position of a public service corporation and change every kind of value it may have except that fixed by the state.

Above all things, science must be chained, otherwise after the public service commissions have got everything comfortably and "perhaps irrevocably" valued, somebody like Mr. Brennan with his monorail and gyroscope car—the most wonderful thing I have ever seen—may come along and, so far as railways are concerned, upset the whole official edifice by revolutionizing the business.

Notwithstanding all these considerations, it is urged as a general principle that it is essential to have an authoritative valuation of public service corporations, first, to determine the reasonableness of the price paid by the public for services rendered, that is, to fix rates; second, to enable the laws for the control of the issue of securities to be equitably administered; third, to determine the amount to be paid over to the public by way of taxes, which cannot be reached without an analysis of the value of the industry considered as a commercial concern. Professor Adams, who states these propositions fairly and moderately, unblushingly dodges the details and the methods of valuation, but rests his case upon the *necessity* for an authoritative valuation for the purposes specified. This view of the matter rather suggests the reply of Lord Chesterfield to the quack who was explaining by way of apology that "he must live", and Lord Chesterfield answered cheerfully: "I do not recognize the necessity."

Certainly the necessity for valuation for any of those

purposes is as yet far from general recognition. Only two or three states have authorized it, and I had supposed the notion that valuation of a common carrier, however it might be measured, or the notion that capitalization based upon such valuation was a factor in fixing rates, was now an expiring delusion. It is the demand for a commodity and the price of it which mainly determine the freight rate for it, and thus, as a distinguished economist has said, the market price of wheat in Liverpool has more to do with fixing the freight on wheat between St. Paul and New York than the capitalization of the railroads between those points. It is quite possible that in a virgin land rates might be fixed with a view in part to a return on the cost of a newly constructed railroad, or to paying interest on the securities which represented that cost; but in this country there is no longer any such case, and a moment's reflection is sufficient to show that if two points are connected by two railroads, one of which cost or is capitalized at $10,000,000 and the other at $25,000,000, the rates must be the same on both railroads between those two points.

As respects the second necessity for a valuation mentioned by Professor Adams, I agree that in the case of a new enterprise the laws in respect to the issue of securities cannot be administered without regard to the value of the property, but the measure of value in that case is the original cost—there can be no other. To undertake, however, to apply that standard to a public utility with a long history and a demonstrated earning capacity is absurd and impracticable. The measure of value in such case is the income or yield, having regard to its permanence and possible increase, and it is the proved or probable income of a property also which, in the long run, establishes its market price, and, for that mater,

the market value of everything else in the world, except merchandise and works of art, as to which the demand, together with considerations of rarity, beauty, and taste or sentiment, intervenes.

If the value of a property measured by the cost of reproduction is less than the value of a property measured by its fruit or its income, any attempt to limit the securities to the amount shown by the first method is tantamount to confiscation, which our constitution and laws do not yet allow. Furthermore, any proposal to limit the amount of the income of a property by cutting down the amount of its securities on which the income is to be paid—and this, I am informed, is the theory of the arch and senatorial Wisconsin philosopher—appears to me to be undiluted nonsense.

As to the valuation of a public service industry for purposes of taxation, I understand that Professor Adams's "analysis of the value of the industry considered as a commercial concern" means exactly what I mean by saying that the value of an industry is measured by its product or income, and I only wish the laws in respect to taxation recognized that principle. They do not. These are the three purposes for which Professor Adams says we must, as a matter of general principle, have a system of valuation; and the Interstate Commerce Commission solemnly asked for an appropriation of $3,000,000 with which to "value" all the interstate railroads in the United States.

There is something fascinating about general principles, and I can understand how a man may persuade himself that, as a matter of principle, there *must* be a valuation to save the courts and officials trouble in doing what he thinks they ought to do. It certainly would be a convenience to have a bureau of values, like the standard

measures in the mint, to which you could go and find out what everything was "perhaps irrevocably" worth. But the individual must wither indeed before the state can be sufficiently reorganized to offer such conveniences. I can only say here: "Beware of general principles." They can only be attained through patient and laborious years. They cannot be reached merely by the expression of vague desires. They are not to be promulgated by every weakling who wants them to lean upon. And remember that one of the things which most clearly marks the transition from youth to maturity is the unwillingness to formulate offhand "general principles."

The whole problem of the possibility and desirability of making a valuation of a public service corporation resolves itself into questions of the method of the valuation and the purpose for which it is made. I regret that it should be gravely discussed merely as necessary for the accomplishment of other purposes, because that appears to me to be a result of the un-American and, I hope, temporary tendency which now prevails, to run to the government with every project and every conceivable grievance, like my landlady in Berlin thirty years ago, who cried out: "The price of meat is frightful, and the police ought to do something about it."

The people of this country have, I think wisely, made up their minds, in consequence of great corporate abuses, that public service corporations should be subject to regulation and, in some respects, control by the state; but when I see the laws showered from the legislatures, and the indiscriminate volleys of rules and general principles from public officials, usually fired through an intellectual fog, I cannot help thinking that the heads of the commissioners, state and interstate, are addled by power, or the lust for it, as much as the head of the millionaire who

wanted a price on Harvard University was addled by his money.

These officials have great powers and most useful functions. They are trying to exercise them with zeal and honesty, and so far, I believe, desire nothing but the public good. As I consider their labors, however, I remember that the great Mommsen once said to me: "Your people play pranks in politics and would excuse them by their youth"; and really, in many of their endeavors, particularly in this matter of valuation, with its irreverence for facts, they seem to be singing the song of the Banderlog who dreamed of

> "Something noble, grand, and good
> Won by simply wishing we could."

# AN ARGUMENT AGAINST AN OFFICIAL VALUATION OF RAILROAD PROPERTIES.

JOSEPH P. COTTON, JR.

The human mind is a curious instrument—it tends to read all the elements of life in terms of dollars. It is to me an unthinkable thing to value the Hudson River, the Erie Canal, or the New York Central Railroad. All are great national highways—and the movement on the last may be the greatest. To describe it in terms of dollars, by adding together units of replacement cost, is a feat of statistical gymnastics. The estimates of the best informed experts might differ on that valuation by millions of dollars.

If we had to have it done, we should all turn to Mr. Adams—warning him, however, that the task was of infinite tedium and difficulty. But granted that he has in five years—a modest estimate—made an authoritative valuation of the physical properties of the New York Central system, and granted he has had the statistical joy of adding up his totals, the question is, what good is it?

It would not be surprising if his total addition of unit costs were considerably more than the total capitalization of the railroad—not because the capital was not watered, but perhaps because the terminal and waterfront properties of the railroad have, because of the presence of the railroad itself, vastly increased in money value. Indeed, that is going to be one of the inevitable "jokers" in railroad valuation if we ever come to it.

I do not understand that any one supposes that an

official valuation of railroads will have any direct relation to any specific freight rate. If we had it today, it would not aid the Interstate Commerce Commission in its decision as to any rate on any commodity between specified points. Freight rates are not made with reference to any one principle or theory, and the law of freight rates is made up purely of negatives. Nor is an official valuation expected to establish any new principle by which rates shall bear any mathematical ratio to the cost of service. The plan is simply to limit the total reward to all railroad investors to a fixed percentage on the official valuation of the respective roads.

For this general theory of valuation and reasonable return, Mr. Adams has, in a vague way, judicial authority. The courts have said that any legislative rate-making which denies a fair return on the value of the property invested is so far arbitrary as to deny constitutional rights and be void, and the courts further indicate 6 per cent as a reasonable return in the application of this test. Mr. Adams's plan finds in this definition of the legal boundary line of folly in rate-making the basis of his system of regulation.

As to the large steam railroad systems, I think any method of limiting the return on the basis of an authoritative physical valuation contains so large an element of error as to be unfair. First, such a basis is in its nature shifting and uneven; the prices of land and materials fluctuate from many causes, and any official valuation would be antiquated before it is completed. Second, the standard has no element of elasticity which will allow it to change with the vibrations of commercial prosperity which have so large an effect on railroad earnings. In bad times railroad earnings, yielding to commercial conditions, will fall below any fair fixed rate of return; in

good times they cannot rise above it; and good times and bad times defy any law of averages which one generation can form.

My objection, then, really is that this program is unwise because it fails to bear any relation to the commercial facts of railroading.

Particularly is this so since the capital required for American railroads is always changing. Following the remarkable prophecy of Mr. Hill, the railroads of America demand a constant influx of new capital, not only in the pioneer lines of the West tapping new territory and building up new communities, but in the East as well. That demand for new capital does not bear any definite relation to increase of passengers or freight. Tunnels are built and to be built, inter-city and suburban lines are to be fitted with electricity, great terminals are erected—that is the story of American railroading today, even on the Atlantic seaboard. Such projects as the tunneling of the Hudson River, which can only pay with the development of communities and business which are created by the existence of the tunnel itself, may well contain so great an element of risk that capital will not go into them on any 6 per cent return. Even in New York railroading it is still necessary to coax the undertaker and the underwriter with a stock bonus. I assert with considerable confidence that most of our railroads are still in a pioneer stage, and that any plan of regulation which will take from them all element of speculative return and large rewards to the investor will tend to limit railroad progress.

One other objection weighs strongly against any system of railway rate regulation based on physical valuation. Railroad systems today are, and under the law must be, competitive. That is true in spite of the fact that there are few rate wars, but many divisions of territory—true

in spite of the fact that competition is not driven to the point of extermination. But if railroad rates henceforth are to be automatically based on a fixed percentage of return on an official valuation, competition will take a more sinister turn. Why under this plan must not the rates of the less valuable road force down the rates of the more valuable, and why therefore must not the more valuable road eventually lose traffic and fail, or operate at an unfairly low return? If the parallel lines from New York to Philadelphia be valued, why must the result not come that one of them ceases to be valuable? And why must not such a plan inevitably result in immense rearrangement and disaster, at least in its initial stage, to railroad investments, and in its next stage to the absolute end of competition between railroads? This idea of railroad competition is not perhaps an essentially valuable one, but the state governments and the lawgivers seem to think it is. In any event, it cannot well exist with a limited return in railroad rates based automatically on valuations. The main value of the competition that exists between railroads today is that it is a spur to new enterprise, and that advantage should not be lightly discarded.

You will see that what I have said applies much less strongly to the official valuation of other monopolies, like municipal water and gas plants. They are more nearly real monopolies, they are less important, with a far less immediate relation to commercial prosperity. The statistician can get from them, or many of them, a valuation that he knows approximates investment cost. Such local monopolies are much more often guilty of real extortion, and it may be vital to regulate and curb that extortion by standard valuations and fixed percentages of return. But trunk line railroads are national institutions. Their rates are not, at this time, on the whole,

extortionate. They have been amazingly vigorous, daring, and progressive.

Do not think I minimize their faults. By all means, if stock watering seems a national evil, curb the future issue of securities. Stamp out special privilege and all favors to shippers. Stop the adulterous intercourse of the railroads and politics. Keep the railroads out of every other form of business. Stop their villainous habit of killing and wounding employees and passengers. Stop future increase of railroad rates not proportioned to increase of operating expense, if you will. That is a constructive railroad program which might delight a president. Why add to it a plan to change the nature of railroad investments by limiting their return, when there is no real evil aimed at save a bogey of extortion, particularly when such a change may endanger the effectiveness and progress of American railroads?

Now as to the by-products of this plan of official valuation: it is stated that it would help in fixing taxes. It would be unimportant in national taxes, for no such tax could be levied, but the tax laws of the several states are often badly administered and unequal. In such states as tax public service corporations on the value of physical properties, there can be no doubt that an official valuation would be a help in checking the careless assessments of the tax officials. That is slight argument for an official valuation and a strong argument for a new method of taxation.

Then as to depreciation. It would certainly help any public regulating body in estimating proper depreciation for any one company to have an authoritative valuation of its physical properties. The question of depreciation has not been satisfactorily treated by American railroad accounting; and we have just seen the transit systems of our large cities bankrupt largely because of that fact.

But if I may suggest, the great thing in depreciation is not to be exact, or to get exact standards, but to be prudent; and that first lesson of prudence the public regulating bodies can teach the railroads now with the knowledge gained from experience. The subject defies exact knowledge, and I submit that no exact standard of depreciation applicable to all railroads can be established by the Interstate Commerce Commission, even with official valuations.

The third by-product is urged in the last report of the Interstate Commerce Commission, that with such an authoritative valuation the Commission would have a weapon they could use to defend their rate regulation in the courts. There is something in that; of course it would be handy, but it does not seem that any such step is necessary for that purpose. The latest decisions of the Supreme Court in the Knoxville and Consolidated Gas cases lay down very clearly the rule that the courts will exercise their power of restraining rate regulation most sparingly and only in flagrant cases. No fair regulating body can, I think, object to that new doctrine, and under it I do not see how any commission is at a serious disadvantage, as long as their regulations are not such as to be flagrantly unfair.

So the sum of my argument is this, that an authoritative valuation of physical properties of the large railroads of the country would be a task of surpassing difficulty; it would supply a basis of rate regulation hardly fair in itself and not adapted to commercial conditions of railroads. No such basis is now essential to efficient regulation, and, however interesting or handy such official valuations might be, however illuminating on certain points to the student of railway problems, a plan of regulation based on such valuations contains no great promise of benefit, and a large possibility of danger.

## OFFICIAL VALUATION OF RAILROAD PROPERTIES—DISCUSSION

EDWARD B. WHITNEY: I notice that while two of the four papers that we have heard were from lawyers, all of those who are slated to discuss the papers are lawyers also. I suppose we are called upon—I speak as a lawyer, although now retired from the profession, because my information about these matters was acquired in that capacity—because our experience may somewhat supplement that of the economists, and to a certain extent we are sometimes investigators in the same field. Our knowledge is less extensive, but occasionally a lawyer has to spend two or three or six months of his time over some single economic problem. And while he reads all that he can find that you have written on his general subject—in the English language—he finds himself perforce to some extent an investigator in a new field. His work meanwhile is being checked up by some other lawyer working on the other side of the same negotiation or controversy. Between them, they may have experiences not always accessible to you, and be able thus to make some little independent contribution to economic thought.

Now as to the judges. I will speak more frankly now than perhaps ever I will again. I notice that you make frequent references to opinions of the courts. I do not think that the courts are able to contribute much of value to this branch of knowledge. They have not sufficient time for thorough investigation of anything. They have too many other things to do. The judges listen to what the lawyers tell them, and come to the best decision they

can in the time permitted. They rank rather with the legislators. What they help make is law, not science. The economists, with a little assistance from lawyers and business men, are the investigators.

It is also important in reading what the judges say to distinguish between the actual matter decided and the remarks which we call *obiter*. The best test by which you can determine whether a judicial lucubration is *obiter* is to consider whether the lawyer to whose cause it seems detrimental was successful or unsuccessful in the case. If he was successful in the case, then he could not move for a rehearing about the detrimental lucubration, no matter how mistaken it may have been, for his client has won, and therefore is not aggrieved. Neither he nor his client is charged with the duty of protecting posterity, or developing the science of economics. Yet I notice that you often quote statements that could not be tested by a motion for reargument, and therefore were not part of what the court really decided. A great many of the judicial declarations which are being quoted upon this very matter of valuation are *obiter,* not binding upon the courts, and liable to be taken back again at any moment.

I do not agree with Mr. Whitridge in thinking that the valuation movement emanated from the State of Wisconsin. I think that it came from the Supreme Court of the United States, in the construction which that court gave to the Fourteenth Amendment to the United States Constitution, providing that property shall not be taken without due process of law. The court held that to make property non-income-bearing was the same thing as to take the property itself; therefore, that fares can not be reduced below a figure which will give some return upon the property of the company whose rates are being reduced. The exact amount of return is not yet fixed.

Some remarks in a recent opinion have led to the impression that it has been fixed at 6 per cent. But those remarks are *obiter*. Examination of other opinions will show that this 6 per cent referred to may include not only returns applicable to dividends but also returns applicable as offset to depreciation. But whatever may ultimately turn out to be the rate of dividend guaranteed by the Fourteenth Amendment, the Constitution requires every legislature, municipality, or public service commission to make some kind of a valuation of the property of a corporation, before reducing its rates.

Now how that valuation is to be made, I can no more guess than can Mr. Whitridge or Mr. Williams. We can get some approximation to the value of a dwelling house in a city, when there are a hundred similar houses in the same neighborhood. But who can value a thing that can not be duplicated, like a railroad terminal? I was once a member of a commission which had to put a valuation on such a terminal on tide water. There was no similar location anywhere. We heard the testimony of all the experts within reach of New York. The only thing that was clear was that the railroad company's own estimate, made before careful study of the subject, was a gross undervaluation. Whether it should be increased 100 or 200 per cent, or more, nobody could guess.

The method of valuation by cost of reproduction is properly subject to all the criticism that has been made upon it. The cost of reproduction of any particular part of a plant has commonly no bearing on the real value of the property as a whole. Let me put one case—that of a valuation which a gentleman who is going to follow me in this discussion actually persuaded a court to make. The court was valuing the plant of a certain gas company. Included in the plant was a certain gas holder which had

a cover over it. That cover was almost as good as new, although it had been there for over thirty years. Hence on good expert testimony, expounded by a very good lawyer, the court valued it at cost less 8 per cent discount, or at about $180,000. But for thirty years past people have not been building covers for gas holders. It has been found that the holders do almost as well without them. Hence I have been informed that in a similar case in Massachusetts the commissioners awarded cost less 97 per cent discount. That would have made this particular award about $5000. Now this is an extreme case, but it is a typical one.

I believe that so far as a valuation can be taken as the basis of rate making it must be a valuation based not upon the cost of duplicating the railroad property or gas property immediately under consideration, but upon the cost of building an up-to-date rival, capable of duplicating its work. If the up-to-date rival can not procure terminals, how is this valuation to be made?

I am not sure that present valuation is the fairest basis for rate regulation. It has been made the basis of judicial discussions, not because of equitable considerations, but because of the wording of the Fourteenth Amendment. But the Chairman informs me that my time has expired.

Victor Rosewater: While I am not perfectly clear in my own mind as to how effective physical valuation would be for the purposes for which it is advocated, I should like to emphasize two or three important points which bear on the subject which have not been given adequate consideration.

First, it should be remembered that the demand for a valuation, which we are now told is unnecessary and

inconsequential, originally came from the railroads themselves, and was set up on behalf of the railroads to protect themselves against what they regarded as a threatened confiscatory reduction of their rates. I happen to come from the section of the country in which the railway rate cases to which reference has been made started, and have some familiarity with them.

In what is known as the Nebraska maximum rate cases, it was the railroads which set up the plea that rates should be compensatory to the extent of giving owners a fair return upon the value of their property, and they persuaded the court to their view. The railroads had no difficulty in proving a valuation to support their contention, and in securing from the court a decree nullifying the rate law on the ground that it would confiscate their property. But in this decree the court made it plain that it had reference to the then valuation of the road, volume of traffic, and cost of operation, and left it to the state to reopen the case at any time an increased volume of business growing out of the development of the country might reduce cost of handling and transporting and make the annulled schedule of rates produce sufficient revenue to be compensatory on a fair valuation. In other words, the Nebraska rate cases show that the railroads could surmount all obstacles to secure a valuation which might be used to maintain their rates; but now, when they fear such a valuation and rule would reduce their rates, they insist that it is impossible to arrive at any accurate valuation, and that such a valuation even if possible would have no bearing on rates.

Second, one of the speakers has called attention to the fact that public service utilities have had to spend a great deal of money for experimental work, and for machinery and equipment afterwards discarded, and has

argued that physical valuation of the property would not take this outlay into account as part of the investment on which the owners were entitled to return. There is no question but that this is a common practice of such corporations, namely, to capitalize all the investment losses and endeavor to charge the public rates that will enable them to pay dividends just the same as if these investments had turned out successful. But the ordinary business man or private corporation is subject to the same losses. He buys machinery which is soon antiquated, or put out of commission by new inventions, but he must charge the cost off to profit and loss and cannot make the public pay for them perpetually in higher prices.

Third, the question of valuation enters in at one other point. Whenever the employees of a public service corporation seek wage increases the question arises whether the revenue warrants yielding to their demands, and their committee is told that the owners are entitled to a fair return on their capital. On how much capitalization are the owners entitled to a return as against the employees and wage-earners? Plainly the earnings are divided between these two classes, and the justice of the claim of the owners to a fair share depends at least in part on the valuation.

Charles F. Mathewson: As I am properly and necessarily limited to a very few minutes, you will pardon abruptness in plunging into the main features of the discussion.

At the outset I desire to take emphatic issue with Professor Adams's suggestion that public service corporations constitute a "partnership" between their stockholders and the public. No partnership in any proper sense exists.

All such corporations, excepting of course plants established by municipalities, which this discussion does not touch, are solely the work of private individuals and are created by private funds. Indeed, until *Munn* v. *Illinois* and kindred cases, decided within the memory of even the youngest of us, public service corporations were not considered as more vulnerable than other private corporations under our Constitution, or as subject to legislative regulation even regarding rates; and the power of the legislature in regulation is still strictly limited by the provisions of such Constitution.

The permissible regulation of such corporations, under the decisions of the Supreme Court of the United States, in no wise implies a "partnership" between the shareholders and the public; private individuals still solely establish and contribute their capital to promote such corporations; and they solely are entitled to any "profit",—the power of the legislature being limited to a restriction of the profit, but not below that which will pay a constitutional return upon the valuation of the investment devoted to the public service. It should, too, occur to those who denominate such a corporation a "partnership", to inquire why the public, if a partner, does not contribute to the losses which not infrequently accrue against a public service corporation even to the point of the bankruptcy courts; and the fact that the public has never been required or sought to contribute to such losses, as an honest partner should, is rather conclusive evidence that the public has not assumed and does not desire to assume the position of a partner in such enterprises. It would be an odd "partnership" which should provide that one of two partners should share liberally in the profits, but should have no part in meeting any losses which might result from the business.

The chief excuse, so far as I understand it, for referring to a public service corporation as a "partnership", arises from the assumption that the public is contributing to its capital the consents (commonly called "franchises") by virtue of which the corporation is enabled to place its fixtures in the public streets; but in this connection very important circumstances seem to be overlooked. In the first place many such "franchises" are bought outright by the corporation from the state, or from its political subdivision whose consent is necessary to such placing. There are electric lighting "franchises" in this city which were voted either upon payment to the municipality of a lump sum, or upon an agreement to furnish to the municipality free lights in consideration of the grant; and there are street railway and other "franchises" payment for which is continuously being made in pursuance of agreements entered into in connection with the grant. It is true that some "franchises" involving right to occupy the public streets with fixtures have been granted in the past without a money payment to the municipality; but it does not follow that they were granted without consideration. On the contrary they were almost invariably granted, in such cases, to induce individuals to embark their capital in a public service for the convenience of the people, which the municipality itself was either unable or unwilling to do; and the consideration for such grants was the investment in the enterprises of hundreds of thousands and millions of dollars by such individuals, taking the chances of profit in a field then often novel and untried, and thereby increasing the comfort and convenience of the general public as contemplated by all parties. Thus about 1823 a franchise was granted to the New York Gas Light Company to manufacture and sell gas in the City of New York, and

as a consideration for such franchise private individuals promptly invested hundreds of thousands of dollars in a new and then doubtful business,—the public being thereby placed in possession of a product infinitely more convenient and attractive as an illuminant than any theretofore known. The public was mighty glad to have the franchise granted and the industry established.

Let us, therefore, have an end to the cry as to the existence of a "partnership" or other rights in the public, based upon the assumption that it has generally "given" away franchises. It has not as a rule "given" them without adequate consideration in some form moving from the other side. And even were such franchises pure gifts, with no apparent consideration in the way of investment of capital or otherwise, it would not materially affect the situation, or establish a "partnership", or vest in the public any legal right in something which it had voluntarily transferred to another. A friend may present to me a watch at Christmas, based upon no consideration except love and affection; but he has not on that account any title either to take or to use the watch after such presentation, to any greater extent than would be the case had I purchased it at Tiffany's and paid a high price for it. He is not a partner of mine, in either the ownership or use of the watch, from the mere fact that he presented it to me; and the same rule prevails if he, in conjunction with other gentlemen who constitute the public, legally presents to me a franchise or any other property or property right.

To a second proposition of Professor Adams I register a dissent, even more emphatic. The first proposition discussed relates rather to definition; but his second advocates a course of action the outcome of which could not fail, in my judgment, to produce results vicious and

disastrous in the highest degree. If I understand his suggestion, it is in substance that "surplus profit earned by a public service corporation, *over the constitutional limit,* should be required by law to be contributed to the public treasury." You observe that he proposes to restrict the return of the shareholders in a corporation to the "constitutional" limit, not to a commercially fair or reasonable return as between business men, but to a limit so low that anything less would be so unreasonable and unjust and oppressive that the court would take the legislature and officers of a sovereign state by the throat, and declare that—with all the presumptions existing in favor of a legislative act and all the reluctance of the court to interfere with the action of a state—the conscience of the court could not permit the legislature to perpetrate the outrage.

Thus in the case of the Consolidated Gas Company of New York, Professor Adams would limit the return of the stockholders to 6 per cent, although no rate lower than 8 per cent was suggested in the investigation of the Stevens Legislative Committee of 1905, and although counsel for the Public Service Commission in the Consolidated Gas litigation admitted in the Supreme Court that it was the intent and desire of the state to allow a return of 8 per cent upon a proper valuation of the company's property.

In holding that anything below 6 per cent for that company would be so clearly confiscation as to be unconstitutional, Judge Hough in the Federal Court said:

"It has not been asserted and is not believed that 6 per cent is a profitable, satisfactory, or attractive rate for the investment of capital in a gas business. In my opinion it is none of these things, but it is the lowest rate which in the City of New York can be considered

*legislatively* fair *to those who are already engaged therein and cannot readily escape."*

It is too obvious to require discussion that if capital were limited to such bare "constitutional" return, so-called, it would see to it with great care that it would not get into any place from which it could not "readily escape." Had such a proposition been heretofore adopted in practice, the immense development of this country by railroads and other public service corporations with a profit of millions of dollars for the people where there were thousands of dollars for the corporations, would have been an utter impossibility; and the putting now into operation of such a rule would inevitably fetter and stagnate development and activity to a calamitous extent. No greater infliction could be laid upon any country, and particularly upon a comparatively new country, than the adoption for the discouragement of capital of any such an extraordinary proposition as I understand to be advanced by Professor Adams in relation to public service corporations.

In dealing with the subject of rates or charges, in which feature the control of the legislature is most often exercised upon such corporations, the valuation of the investment of the corporation upon which it may receive a fair and reasonable return is, of course, an important consideration; and as to the basis of such valuation, we find much light in recent decisions, and particularly in that of the Supreme Court in the Consolidated Gas case to which I have referred.

In the first place that court has established the proposition that it is the "present value" of the investment, and not the original cost of property whether derived from earnings or capital contributions, upon which the shareholders are entitled to a return. Controversy on this point

arose in that case, for example, in relation to land occupied by the company, the original cost of which was much below its present value; and the Supreme Court held in effect that no divine right existed in a certain class of persons in the City of New York, merely because they happened to be consumers of gas, to use the land upon which the generating and distributing plants of the Consolidated Gas Company are established at any lower valuation than such land could be leased or sold to any other member or members of the public,—a result inherently just.

The theory advanced in behalf of some of the state officers on that point is worse than socialism. Thus, if land costing the company or its predecessors $5,000,000 some decades ago was now worth $12,000,000, they claimed that the consumers of gas (not even the entire public, because not all the public consumes gas) should be entitled to the exclusive use of the additional $7,000,000 of value over original cost *gratis;* that is to say, they contended for rates that would pay a return to the company on only $5,000,000. Under even socialistic theories the stockholders of the company, as part of the public, would have been entitled to at least their proportionate share of the use of or profit derived from this additional $7,000,000; but had the arguments of the gentlemen in opposition been accepted by the courts, such shareholders would not have received even that small consolation.

And so, too, the Supreme Court held that not only must the tangible property of a corporation at present value be included, but that the value of its "franchises" must also be included, in the valuation of its assets. Such "franchises" have been held to be property in every sense of the term, subject to assignment and sale and possessing all its attributes. They are not mere personal "rights" or "li-

censes." They constitute easements, an actual interest in the soil,—to use the language of our Court of Appeals in the Ghee case, "a perpetual and indefeasible interest in the land constituting the streets of a municipality", and the Supreme Court said in the Consolidated Gas case that "franchises of this nature are property and cannot be taken or used by others without compensation,"—thereby ending another "iridescent dream" of some of my good friends.

It is true that the item of "good will", the value of which was allowed by the Master, was excluded by Judge Hough and his action approved by the Supreme Court in the Consolidated Gas case; but it was not declared by either court that, as a general proposition, good will is not an asset in a public service corporation which must be included in the valuation of its property. On the contrary the direct implication is that good will is ordinarily to be included. The special reason stated for its exclusion in the Consolidated case was, in substance, that the Consolidated Gas Company was a "monopoly"; that the situation in New York City was such that it was inconceivable that the municipality would ever permit the streets to be torn up to install another system of mains, even were there room for such mains in all of the streets of the city; and that as the Consolidated Company was never to be subjected to competition, there was in its case no such "good will" to be valued as would exist in the case of an established business not so necessarily constituting a certain and permanent monopoly.

Indeed the lower Federal courts have repeatedly recognized the propriety of the inclusion ordinarily of good will in the case of public service corporations; and perhaps never more impressively than through Justice Brewer, now one of the most able and distinguished mem-

bers of the Supreme Court of the United States, in the National Waterworks case, where he declared that "the fair and equitable value" of the property was not the "original cost" or the mere "cost of reproduction", but "something in excess of the cost of reproduction" in that additional value existed from the fact that the system was in actual operation, with established connections with consumers and the other elements which make a property worth more as a going concern than the mere reproduction cost of a cold plant only just ready to start up; and that such additional value must be taken into consideration in reaching the total valuation upon which shareholders may claim a return.

Nor must it be understood that in all cases even the present cost of reproduction of the tangible property of a public service corporation, plus the value of its franchises and of its good will, measure the total valuation upon which it is entitled to a return. In many businesses, such as the business of electric lighting and street railway operation in this city, unforseen changes have been so rapid in the progress of the art that it has been necessary repeatedly to replace important and expensive parts of plant within a very few years. Thus, scarcely had the street surface-railways of this city installed a cable system in place of animal traction, when it became expedient to discard that system and install the underground trolley, which to that time had not been finally proven feasible for use under conditions prevailing in New York City. Of course the extraordinary expenditure incurred in such rapid development and supersession must be met either by contributions from current operation, or by addition to capital account; and in some cases it is utterly impossible to provide for these transformations from earnings, for the establishment of a depreciation

fund from earnings sufficient to care for them at the instant would require a charge for the product or service so great as to be intolerable and prohibitive. Accordingly, in such cases, it becomes necessary and proper to charge the extraordinary expense resulting from such transformations to capital account, and (for the time being at least, pending the establishment and operation of a depreciation or sinking fund account, when found expedient, to care for it) it must be included in the total valuation upon which a return is to be earned. As a concrete illustration, it was shown in the Milwaukee Electric Railway and Light case that the entire cost of reproduction of existing property was about $5,000,000, and upon that basis a city ordinance established a rate of charge which the city believed would permit a reasonable return upon that valuation. The ordinance was declared invalid by the Federal court, however, one of the chief grounds of the decision being that the city failed to allow in capital account at least $2,000,000 more, expended for experimental or preliminary purposes or for superseded plant, which had disappeared from view in the existing plant by reason of the rapid progress of the art. In other words, to the cost of reproduction of the property the court in effect held that at least 40 per cent should be added, as representing vanished capital which had nevertheless gone into the investment and upon which upon all intelligent business considerations a return must be allowed.

In some quarters an insistent demand has arisen for a general or universal physical valuation of the property of all public service corporations, culminating in the recent recommendation of the Interstate Commerce Commission (if statements in the public press are to be accepted) that a "physical valuation" be made of the

property of all transportation corporations subject to its jurisdiction, of such a character as to bind the courts as well as the Commission. I consider such a demand wholly unjustified by any existing situation.

Where a question of the reasonableness of rates is raised upon complaint or in other appropriate manner, in any specific case, a valuation of the property of the public service corporation affected is, as we have said, necessary as an element in determining such reasonableness; and in such cases the method of procedure, whether by an administrative commission in the first instance or by the court in review of the decision of the comimssion, if any party considers himself aggrieved, is well defined and needs no comment.

But any general valuation would involve the employment of an army of experts and the expenditure of a vast sum, and the magnitude of the work is such that it would require fifty years or a century to complete a valuation which would be worthy of consideration, all of which might possibly be excused if the result would be proportionately useful and valuable. It was, I believe, the consensus of experts on both sides in the Consolidated Gas case that it would ordinarily take an independent examiner a year, working with an adequate staff, to make an engineering inventory and proper appraisal of the property of that gas company alone; and the expert whose estimate was finally in substance accepted by the court was able to complete his appraisal in a much shorter period only by working virtually night and day with a large staff of skilled assistants, coupled with the fact that he or the firm with which he had been connected installed a large part of the apparatus of that gas company and was already familiar with shipping weights and other details of construction from his or

their books. From this it will be quite clear that the period which I have named as necessay for a general physical valuation of even our railways, is not extravagant. Indeed, whether one is considering a gas company or a railway, large items of expense, such as foundations of apparatus or track, difficulty of cuttings here and there dependent upon the nature of the soil, and a thousand other features which might be mentioned, cannot be accurately estimated or sometimes even known, except upon an examination of the books and records of the constructer, which alone will disclose obstacles which may have been met and overcome.

And finally, when and if this vast and expensive and long drawn out "physical valuation" has been completed on some *quia timet* theory, experience teaches that not one in a score of public service corporations will be subject to such a complaint as to its rates or service as to render its "physical valuation" a matter of importance; and then in the case of that one, the chances are that the valuation will have been so far back as to be either useless or largely inaccurate for purposes of "present value." In other words, the time and labor involved in this great "physical valuation" will have been wasted.

Moreover, it is common experience that the estimates of commissions largely or wholly based on *ex parte* examinations, without the intimate familiarity and detailed records possessed by the engineers of the corporation involved, are generally so wide of the mark as to be misleading rather than valuable in any aspect; and almost universally such estimates fall far below actual values as determined in judicial proceedings where both parties can be heard and experts are subject to cross-examination. This is well illustrated by the testimony of an alleged distinguished expert in the Consolidated Gas case, who

testified with great solemnity that the mains of the company could be reproduced for about $8,900,000, although the company's engineers had estimated $12,650,000 as a conservative figure; and this estimate of $8,900,000 would doubtless have gone into the records of an *ex parte* commission, investigating the subject, as the real cost of such reproduction. On cross-examination he was asked if in the laying of the mains he allowed for the bridging of trenches at cross streets, which occur about every two hundred feet on the avenues; and he replied that he did not, being apparently wholly ignorant of the requirement of the city authorities that such bridging must be done. When asked as to the method of laying the mains, he assumed that it would be done by "puddling", being again ignorant of the fact that the authorities explicitly require tamping instead of puddling, the former a more expensive method. When asked whether he had allowed for sheathing in the trenches it appeared that he had not, although sheathing was necessarily and almost universally employed by the company to support contiguous subsurface structures; and when we allowed for sheathing, it so narrowed his trenches that in many instances it would have been impossible to get the mains in. To make a long story short, when to his $8,900,000 had been added the expense attending the various items of expense which he had omitted, his figures were brought up to about $13,500,000, or nearly $1,000,000 more than the company claimed to be the cost of reproduction.

Of course any "physical valuation" without, or ignoring, engineering inventories and evidence is even worse guesswork, and is likewise morally sure to overlook vast items of value and be far below the mark. Thus, the old Gas Commission in 1906 examined the Consolidated Gas Company and reported that the total value of the com-

pany's tangible property was only $30,000,000 and its franchises practically worthless, following the finding of the Stevens Legislative Committee of 1905 that both the tangible property and franchises were worth not more than $30,000,000. Compare this with the figure accepted by the Supreme Court of the United States in the resulting suit, after some pruning of the valuations of the Master by the Circuit Court and the Supreme Court, nearly $56,000,000; in addition to which a return was included in the estimated cost of so-called "purchased gas" on a further capital of $12,000,000, being the value of the company's Astoria plant capable of producing such gas, making a total of about $68,000,000,—less than $8,000,000 of which represented intangible property in the shape of franchises. Needless to say, the valuation of the Gas Company's property thus established by the courts has put an end to the flood of 75-cent and 70-cent and other like "gas bills", which had been previously introduced in the legislature on the theory that the value of the company's property, upon which it was entitled to a return, was only $30,000,000; and has of itself justified the litigation.

And finally the suggestion of the Interstate Commerce Commission that a general "physical valution" should be made which would *bind the courts* as well as the Commission, is fatuous and impossible of realization under our constitution. Where a public service corporation objects to a rate fixed by a commission, as not affording a constitutional return on the value of its property, it commonly brings an action in court to restrain the enforcement of the rate as depriving it of its property "without due process of law", and due process of law is well settled to relate to judicial procedure, and not to be covered by the action of any legislature or commission.

The court in such a suit will proceed to determine for itself, upon competent evidence presented, the true valuation of the company's property as a necessary element in determining the constitutional adequacy of the rate in question; it will no more, and can no more, accept or be bound by the estimate or finding of any commission, than the Federal courts could have been or were bound by the findings of the Gas Commission or Stevens Committee in the Consolidated Gas case to which I have referred; and what a travesty on justice it would have been had the court been bound to accept such findings as reliable—and much less conclusive—proof of value!

Of course no court would entertain a proceeding for abstract valuation of properties of all public service corporations; the court requires a concrete case to induce it to act. It will not act in a "moot" case; its hands are full to overflowing with litigation involving existing controversies; and thought of any general valuation in which it can participate, and which will therefore be binding on it and the companies involved, may as well be dismissed out of hand.

A. C. Pleydell: The question which Mr. Williams put as a challenge should not pass unanswered. He asks those of us who believe in rate regulation what we would do in the case of an ordinary expressman with a wagon, who, by introducing economies in operation, increases his profits by perhaps ten times his former profits on the capital invested. The answer is simple. The public would not need to regulate his rates. If his charges produced a profit that was greatly in excess of the usual return on capital and services, so many other people would engage in the express business that the charges would soon be brought down by free competition. Any-

one can run a wagon through the streets, but practically there can be only one street railway company. When competition regulates charges, no action by the government is needed; but where, by reason of monopoly, rates may be higher than actual cost of service, the public, which grants the monopoly, has the right to restrict the charge.

This is the essential point in the controversy. As Mr. Cotton has pointed out, local public service corporations, by reason of their exclusive control of highways, can charge rates in excess of ordinary business profits. In the case of railroads, the monopoly is not as complete, but competition is greatly restricted.

The underlying idea of Professor Adams's paper seems to be that where two railroads operate through practically the same territory, and one has a more advantageous route than the other, rates shall be fixed at a point that will give the weaker railroad a fair return on its actual investment (in other words, expressed in economic terms, make its route "no-rent land"); and that the excess earnings, which such rates permit the better located railroad to receive, shall be treated as economic rent attaching to that railroad land, and shall be taken by the government.

We know that in the case of ordinary commodities prices are determined by cost on the poorest land in use, or "at the margin." Larger profits due to a lessened cost of production at other points make rent. Professor Adams would bring railroad charges down, by regulation, to cost of service of the least advantageous route, just as competition will bring down prices where there is no monopoly.

B. H. Myer: I have before me the papers of Messrs. Williams and Whitridge and the discussions of Messrs.

Whitney, Rosewater, Mathewson, and Pleydell. The general impression created by all of these collectively is that Messrs. Rosewater and Pleydell are perhaps the only ones in this group who recognize in valuation and allied proceedings rights of the public of sufficient merit to compel consideration. Mr. Rosewater not only suggests the incongruity of showing the practical impossibility of making valuations on the one hand, and of urging specific valuations in contentions before courts on the part of public utilities on the other hand. Mr. Rosewater furthermore suggests the very important idea that valuation has a direct bearing not only upon questions of rates and service, but also upon the wages of employees of public utility corporations. It is well understood that the investor naturally seeks the largest possible return in the form of interest and dividends; that the public desires the best possible service at the lowest possible rates; and that the employees are constantly striving, and properly so, for increased pay and reduced hours. A fair valuation of the property devoted to the public use is one of the most important factors in adjudicating the claims of these three great rival claimants to whatever surplus there is available for distribution among them.

One of the most fundamentally important questions raised by Mr. Williams is whether public utilities shall be permitted to earn "that profit which is the ordinary reward of effective management or shall they be limited to an investment return on the capital employed." I regard this as a fair statement and a most serious question. In view of the fact that the so-called Wisconsin idea has been made so extremely conspicuous in this discussion, I will venture to state, in answer to Mr. Williams's question, that the Railroad Commission of Wisconsin has of-

ficially expressed itself to the effect that the rate of return which must be allowed to a utility depends upon the conditions and circumstances in each particular case. The rate of interest is influenced by national and international competitive forces modified by local conditions. One state or one corporation cannot arbitrarily segregate itself and stand in isolation as if exempt from these forces. Whatever rate of return is necessary to invite capital into the particular field of enterprise under consideration must be allowed by public administrative authorities; Payne et al vs. Wisconsin Telephone Co., 3 W. R. C. R. 1; also Hill vs. Antigo Water Co., 3 W. R. C. R. 623, and a number of other cases.

Mr. Williams states what I must assume to be the fact, that the Interstate Commerce Commission objected to the passage of a bill requiring a "fair value" to be made of the property of the railway companies, and that instead it wanted the valuation restricted to the determination of the cost of reproduction. This Mr. Williams interprets to mean a desire on the part of the Interstate Commerce Commission to establish an *ex parte* valuation adverse to the carriers. If the first assumption is correct, does the conclusion follow? In my judgment, decidedly not, for the reason that the term "fair value" is an inclusive term embracing all the elements of value, which cannot be known except on investigation in each particular case; while the cost of reproduction is, in my judgment, an element which enters into every "fair value." This element called cost of reproduction can be ascertained with respect to every property independently of all the other elements. It appears to me, therefore, entirely feasible to make a so-called physical or inventory value of railway and other public utility properties in order that the most important element in establishing values may be deter-

mined before the contingency which gives rise to the necessity of a valuation has actually arisen and must be speedily faced. According to Mr. Williams, the cost of reproduction would have "small utility" in cases involving particular or group rates. He thinks that in cases of this kind the question is whether "in view of the value of the particular service, the rate fixed by the carrier bears upon that service with disproportionate severity." Everyone must agree with Mr. Williams to the effect that the value of the service must be taken into consideration in establishing a rate; but when the valuation of the service is caused to be made the measure of a particular rate we may well ask, "By what measure do you value the particular service?" Even in the case of a particular rate, has not the cost of service and the value of the property something to do with that rate, and are not these factors at least coördinate with the value of the service?

Mr. Williams further thinks that before incurring the "enormous expense" incident to establishing the cost of reproduction it should be determined what relation, if any, such cost of reproduction will have to the valuation of the railways. Making this question applicable to all utilities, a fair answer is that the exact relation of a particular physical value to the total value of a particular utility is something which cannot be ascertained in advance, but must be established in the light of all the circumstances in each case.

Mr. Mathewson, too, seems to have some anxiety about the great cost of doing such work and thinks it would require from 50 to 100 years to make a valuation of the physical property of the railways in the United States. The states of Michigan, Wisconsin, Minnesota, and Washington spent less than three years each upon this

work, and I have not the least doubt that a score or more of engineers in New York City alone could successfully complete such a valuation of all the railways in the United States in less than three years.

It is to be regretted that Mr. Williams devotes such a large part of his paper to adverse criticism of the Interstate Commerce Commission, especially with reference to the matter of accounts. Having been a member of one of the committees which participated in the deliberations preceding the official promulgation of these accounts, I have some notion regarding the method of procedure, and I find myself quite unable to share the views expressed by the writer of the paper.

Returning to the matter of valuation, Mr. Williams suggests that valuations are frequently made "by subscribers to new issues of securities." But is this the only valuation which should be made? Can such a valuation be safely used in the determination of the many great interests with which the quasi-public property of public utilities is affected? Have we not heard much of the issuance of securities to the full extent of the earning capacity of a property and even greatly in excess of that capacity? And do we not know of instances where the promoters of such companies had disposed of all of the securities in the issuance of which they were instrumental before it was discovered that the permanent earning ability of that property was nowhere nearly equal to the burden imposed by such securities?

I think Mr. Whitney's remark, "Now how that value is to be made, I can no more guess than can Mr. Whitridge or Mr. Williams", is a just indication of the degree of seriousness with which these gentlemen regard the question of valuation. In other words, not one of them suggests a constructive program which intelligent men

may follow in the work of valuation and avoid the pitfalls which all of these gentlemen seem to think exist on every side. Mr. Whitney thinks that valuation for rate making should be based "upon the cost of building an up-to-date rival, capable of duplicating its work." It so happens that I have heard this duplication theory advanced by its ablest exponents from all parts of the United States. But not one of these has suggested that such an estimated cost of building a rival plant should be used as the basis for rate making. The investors of this highly ingenious method have suggested its use, so far as I am aware, only for the purpose of determining what they conceive to be the "going value" of public utility property.

Mr. Mathewson asserts ". . . . That experience teaches that not one in a score of public service corporations will be subject to such a complaint as to its rates or service as to render its physical valuation a matter of importance. . . . . ." It would be interesting to know to what experience he refers. This certainly is not the experience of the Wisconsin Commission. Among the hundreds and even thousands of matters which have come before us relating to rates and services there is scarcely one which does not involve the question of physical valuation.. Mr. Mathewson refers to the Consolidated Gas case. The record of that case shows that physical valuation was a most important factor in the proceedings.

I now wish to remark briefly upon the paper of Mr. Whitridge. A discussion such as his paper really calls for would greatly exceed in length the original, for the reason that Mr. Whitridge makes such a severe and, in my judgment, unjust attack upon my colleague, Mr. Roemer; and through Mr. Roemer he makes the same attack upon what Mr. Whitridge designates the Wisconsin idea and which he thinks has contaminated the New York commissions.

Mr. Whitridge is a lawyer and may thus be presumed to have some knowledge of the law. He is an officer in about a dozen different corporations and must, consequently, be familiar with the rules of business. He is a member of a considerable number of learned societies and must, therefore, have heard what scientific discussions are like. Mr. Whitridge's remarks with reference to Mr. Roemer show little evidence of any of these. I am constrained to say that if Mr. Whitridge were to file a brief with a higher court in the State of New York, constructed in the manner in which this paper is constructed in so far as it relates to my colleague, it is not at all certain that the court would not promptly have such a brief stricken from the record. It seems to me that it is very clear from a reading of it, that Mr. Roemer's address did not touch upon the question of the particular elements involved in the valuation of the property of a public utility at all. If Mr. Whitridge had quoted in full the paragraph from which he excerpted certain sentences, the absurdity of his criticism would have been obvious. The paragraph in Mr. Roemer's address reads as follows:

"That every legitimate element of value, whether tangible or intangible, might be considered, the law provides for the valuation of physical property and of all the property of a public utility 'actually used and useful for the convenience of the public.' In view of the indefinite and uncertain statements found in the opinions of most of the courts regarding the elements of value that properly and necessarily enter into the matter and must, therefore, be considered in arriving at the fair and just valuation of the active property of a public utility, the legislature wisely extended the latitude of the inquiry so that no infirmity in the scheme of valuation proposed might exist because, perchance, of some transgression of the provisions of either the state or the Federal constitution inhibiting the taking of private property for public pur-

poses without just compensation being made to the owner thereof. Between the Scylla of a physical valuation and the Charybdis of a stock and bond valuation the Commission is thus left by the law to steer its course in arriving at a valuation for earning purposes which will be just to the legitimate investment upon the one hand, and fair and equitable to the public upon the other hand. The duty thus imposed upon the Commission is the gravest and most important of all its functions. The value of every security of a public service corporation in this state will be determined and perhaps irrevocably fixed by the appraisal made by the Commission of the property of such corporation upon the credit of which such security was issued. There can be no escape from this conclusion. The effect will be of far-reaching importance. Fair and reasonable as such appraisal may be, it will signify to the world that in the future public utilities in this state will cease to be subjects for speculative investments. It will also indicate that which is more important, to wit, that actual and *bona fide* investments in such concerns, when providently made, will be secure under state supervision and the adequacy of the security will be maintained by a strict enforcement of the law requiring, wherever and whenever possible, an adequate depreciation reserve fund to be set aside so that the physical plant may at all times be maintained to a maximum of efficiency, and the integrity of the investment may not be impaired from any cause or contingency incident to the operation and use of the property."

Furthermore, if Mr. Whitridge had been informed of the methods employed by the Wisconsin Commission, as were the most of his auditors, he would probably have hesitated before expressing views so diametrically opposed to the facts. Any report of a valuation by the Commission refutes his assertion respecting the views of the Commission or of any of its members. The following extract from the syllabus in the case of the State Journal Printing Company vs. the Madison Gas and Electric Com-

pany[1] will suffice as an illustration of which many others might be adduced from numerous decisions of the Commission: In arriving at these valuations consideration was given to the cost of reproducing these plants new; the cost of reproduction new less depreciation, or the present value; the original cost and the book value to the present owners of the respective plants as disclosed by the construction accounts and balance sheets; their capitalization; their earning value as based upon a 7. 5 per cent earning basis for the gas plant and on an 8 per cent earning basis for the electric plant; and on various other factors that are more or less closely related to the matter of valuation.

Mr. Roemer and other members of the Wisconsin Commission would like to know in what official document Mr. Whitridge can find even a vestige of support for the statement that, "The Wisconsin philosophers have frankly funked the whole thing and sought shelter for themselves behind the experts." We have listened many hours to the testimony of experts and have considered thousands of pages of their documents relating to valuation, but we are not aware of having become the slaves of any one or all of these estimable gentlemen called experts, as our official decisions will amply demonstrate.

Mr. Whitridge says that "good-will must be recognized as an element of value", if competition in public utilities can be conceived of under the Wisconsin doctrine. Reference to the Wisconsin Public Utilities Law shows that the whole theory of the law is—what must long have been apparent to the most of the members of this Association—that competition as a guarantor of reasonably adequate service at reasonable rates has failed everywhere the world over; and the Legislature of Wisconsin, in my

[1] 4 W. R. C. R. 501.

judgment very wisely, predicated the whole of this legislation upon the theory of monopoly in the public utility business. With reference to the telephone business a slight modification of this idea was incorporated in the statute, but this requires mention only in the passing. It is, therefore, novel that Mr. Whitridge should promulgate the idea of good-will as an element of value in a monopolistic business when scarcely one of the many able attorneys for public utility corporations who have appeared before the Wisconsin Commission during the past years has advanced such claims. Assuming, however, for the sake of argument, that Mr. Whitridge's claim of good-will as an asset in a public utility enterprise should be recognized, does it not follow that "ill-will" should then also be recognized as a liability; and might not Mr. Whitridge be able to point out certain public utility properties in the City of New York, for instance, which, because of their subservience to the ideas which he has represented before the Economic Association, have accumulated a sufficient volume of ill-will to be completely submerged?

It is also to be regretted that in his animadversions with respect to my colleague, Mr. Roemer, Mr. Whitridge must go out of his way to cast reflections upon "the arch and senatorial Wisconsin philosopher." The theory of this worthy gentleman, in matters referred to, appears to Mr. Whitridge to be "unlimited nonsense." All members of the Association who have heard the senior senator from Wisconsin characterize many of the things for which Mr. Whitridge apparently stands may imagine for themselves the kind of answer to his assertions Mr. Whitridge would receive from the senator. Furthermore, due largely to educational campaigns of this same Wisconsin senator, there exists in the State of

Wisconsin a high degree of general intelligence with respect to public questions; and the great masses of our people have long since repudiated the antiquated notions with respect to corporate management to which this New York gentleman is apparently still addicted.

In concluding his paper Mr. Whitridge says "that the people of this country have, I think wisely, made up their minds...... that public service corporations should be subject to regulation." Like others of his class, fortunately rapidly decreasing in numbers among corporation managers, Mr. Whitridge professes friendliness toward the idea of regulation, but nevertheless promptly proceeds to demolish to the best of his ability every sane idea upon which such regulation must rest if it is to be of any substantial use to the public at large.

In conclusion, I desire to express the hope that members of the Association and all others who read Mr. Whitridge's paper will study diligently the documents issued by the Wisconsin Commission, especially with reference to valuation in its relation to rates and service; and, in addition, inform themselves with regard to the many lines of activity embraced in the so-called Wisconsin idea. I am confident that every thoughtful man will arrive at the conclusion that Mr. Whitridge's remarks with reference to Mr. Roemer and the work in Wisconsin are full of blunders and misrepresentations for which even his obtrusive coquetry with the great names of Huxley and Mommsen cannot atone.

# THE CAUSES OF TRUSTS AND SOME REMEDIES FOR THEM.

FRANCIS WALKER.

While trusts, or to use a more satisfactory terminology, industrial combinations and monopolies, are comparatively recent phenomena in our economic life, their vital importance to society and the individual has resulted in attracting to them an unusual degree of attention. The subject itself is a complex one, and, the more intensively it is studied, the more difficult it seems to bring all the phenomena into a brief formula, or to prescribe a general policy by laying down a simple rule. It would be impossible to explain in a short paper all of the real causes of trusts, many of which have never been thoroughly studied, and it would be unprofitable to discuss all of the proposed remedies. This paper aims simply at suggesting for discussion certain of the chief causes and certain remedies which appear to be of special interest to the economist at the present time. As far as possible the legal aspect of the question will be omitted from consideration, while the economic phases will necessarily be treated in the broadest manner, and, therefore, without exclusive reference to our peculiar legal conditions.

Industrial combinations may be described as associations of originally independent makers of, or dealers in, a given class of commodities, established with a view to regulating the production or sale of them in a manner more profitable to themselves than that which would be determined by free competition. Industrial monopolies may be

described as particular concerns or combinations of concerns which have acquired a more or less complete possession of the markets in their respective fields of production or trade. The "trust" falls in both of these classes, but does not include all the types of either of them.

The causes of combinations and monopolies are various, and may be classed according to several different principles. In the case of a given combination or monopoly it would probably be found on investigation that it owed its formation to several causes. While the arbitrary determination of the trust promoters or founders is often regarded as the cause, there are generally certain conditions existing which virtually control their determinations.

The following headings should be regarded rather as an arrangement of topics for convenience than a scientific classification. Monopolies may be classed according to their chief causes as follows:

1. Those depending on legal grants, such as patents and franchises.

2. Those depending on the sole possession of natural resources.

3. Those depending on rebates or similar special advantages.

4. Those depending on unfair competition, such as local price cutting, or preventing competitors from getting supplies and facilities.

5. Those depending on efficiency superior to all competition.

6. Those depending on agreements among competitors.

It is evident that as monopolies may result from combinations, a whole train of other causes of monopolies appear, namely, those that lead to combinations. Before

coming to the causes of combinations, however, it may be noted that a number of circumstances which afford a basis for monopoly are likewise inducements to combinations. In order to avoid repetition and confusing in a greater degree a subject necessarily complicated, the effects of these conditions favoring combination need not be considered any further. Classifying combinations according to their causes, we may distinguish the following chief kinds:

1. Those induced by bad systems of corporation law, which allow undue liberty in the consolidation of corporations, and under which there is opportunity given to promoters to make improper gains, by the issue of watered stocks, and by other financial devices.

2. Those designed to take advantage of a protective customs duty.

3. Those designed to counterbalance labor unions, and to give to the employers greater power in bargaining with labor.

4. Those designed to counterbalance a combination in another branch of industry.

5. Those induced by the destructive effects of excessive competition.

6. Those induced by the opportunity to get control of the market, and to enhance prices.

It will be observed that monopolies and combinations, though two distinct things, are not mutually exclusive. Some monopolies are consolidations or combinations of a less permanent or less integrated form. On the other hand, almost any combination may become a monopoly under certain conditions. Most of the so-called trusts, which have a monopolistic power, have passed through the stages of loose combination to a more or less consolidated form or organization.

The combinations which are formed in consequence of the effects of excessive competition may be often practically necessary, if the producers, as a class, are to avoid losing money, and in this sense the elimination of competition may be described as natural. The term natural monopoly is familiar and refers generally to such enterprises as steam railroads, or more especially to municipal enterprises, such as street railways, gas works, and water works. But these are only a few of the enterprises which become noncompetitive from a natural cause, in the sense the term natural is used above. When the matter is thoroughly analyzed, it results in the conclusion that, under certain conditions, competition, when effective and unremitting, becomes destructive of even the stronger competitors, and thus tends, either to eliminate all competitors except the one final victor, or to reduce a comparatively small number of survivors to bankruptcy. It may be fairly said that under such circumstances the conditions of natural monopoly exist.

In the popular mind, the principal cause of combinations and trusts, probably, is the mere chance presented to secure control of the market of a particular commodity, either for a brief period, or in a more permanent way. That is, no particular factor or circumstance was decisive, unless, perhaps, the personal element in the promoters of the combination. It is particularly with this type in mind that our anti-trust laws have been enacted. In this group, which may be called the *omnibus* group, all the combinations, not due to specific causes already mentioned, may be included. Combinations organized simply with a view to control prices, and without any other hold on the trade, have generally been characterized by an extravagant price policy. The reason for this is that a mere agreement among producers is not likely to last long,

and a consolidation of them in any case would be likely to develop new competition, so that under such circumstances the natural impulse is to make hay while the sun shines.

Let us return now to the question of natural monopolies. It has frequently been observed that one of the most fertile fields for the growth of combinations and monopolies is where there exists a limited supply of some highly useful gift of nature, such as coal, ore, petroleum, timber, water power, etc.

While it cannot be proved statistically, there is good ground for believing that in several branches of mining, the products, under a competitive system of production and sale, often do not, on the whole, repay the producers for their outlay. The people who generally make money from such products are those on whose lands the deposits are found, and who lease them on royalty. Production is encouraged in some branches of mining by the speculative profits, and maintained in others, even though the business as a whole is a losing one, by the fact that capital is heavily and irretrievably committed. The conclusion as to the unprofitableness of mining seems to be justified particularly by a study of the history of coal mining and iron-ore mining, where the industry is conducted under conditions of free competition. As such conditions, in a certain sense, afford a justification for combinations, it is important to examine them in some detail. Combination in self-defense can hardly be regarded as an assault on the public welfare requiring penal correction.

A good illustration is found in coal mining. At the beginning of the exploitation of a coal field, it naturally happened that the producers attacked, at first, comparatively accessible deposits, and consequently were obliged

to apply but little capital, or otherwise commit themselves seriously to the continuation of the business. Under such circumstances, they prospered or failed, continued or abandoned their activities, according to the profits obtained. As the business developed, however, the coal lands acquired more value, due to the development of the market (or demand), and those who engaged in coal mining, or those who had coal lands, found themselves in the position of holding something of value, which, however, could yield a return only if brought under exploitation. On the other hand, the development of the industry led to the sinking of more capital into mining improvements, such as shafts instead of slopes, more elaborate mechanical equipment, etc., either because the coal had to be sought at deeper levels, or because such an equipment, when properly utilized, resulted in a reduction in the cost per ton of coal mined. In fact, it was found that operating costs depended in a large degree on output, or how much coal could be taken from a single shaft. This condition drove every operator to try to increase his output in order to lower his costs.

The inevitable result was overproduction. The market became glutted with coal, which so declined in price that it afforded a profit to only a few of the best located producers. Many of those who were losing money stuck to it because their capital was committed; others failed outright and quitted the business. It was quite possible, however, for production to be continued in mines in which the cost of production exceeded the market price, particularly if the operating company became bankrupt, and sold its improvements far below cost. The natural growth of demand was the beacon of hope to the mining operator, but, when the demand did outstrip production, either from the natural growth of population

and use, or from unusual industrial activity, this opportunity was seized on by those who possessed coal lands hitherto unexploited, or previously exploited but abandoned, to enter the business, so that production and competition in a short time became excessive again, and, with that, a new period of glutted markets and unprofitable business occurred. In such periods of bad times, there was no chance to accommodate production to demand, through a general reduction in output, because, as long as the coal operator was working on a strictly competitive basis, he could not reduce his output without increasing his cost per ton. The extra amount of coal produced by him had much less effect in depressing the market price than in diminishing his own costs. As long as he could not rely on others reducing their output, the most advantageous thing for him to do was to increase his own output. Under such circumstances, competition became destructive, cut-throat competition, from which the only results could be heavy losses for many, until the excessive productive capacity was put out of operation, or a new growth in demand caught up with the output.

Concerns which were handicapped by extensive investments in coal lands, which could not all be brought into operation at once, because there was no market for the coal, being thus burdened with heavy carrying charges, were naturally the ones that suffered most in these recurring periods of overproduction and glut. As long as lands adjoining theirs, equally available for mining, were not exploited, the owners felt themselves deprived of an opportunity to earn something from them, and often, indeed, where they had purchased them with a view to mining, were paying carrying charges on them in hard cash. This tended to force such properties, directly or indirectly, into the ranks of producers. As

such new competition would not be welcome, those already in the field, who contemplated continuing so indefinitely, would often buy or lease such lands, establishing gradually large reserves. As long, however, as free competition persisted, and there was a division in the ownership of the coal lands, the price of coal could not rise, in a permanent way, very much above the cost of mining, and would often fall below it. There was no margin, therefore, to cover the carrying charges of extensive reserves of coal lands.

These two factors, then, the condition of diminishing cost with enlarged output, and the pressure of the owners of unexploited properties on those that are engaged in operating mines, both tend irresistably to overproduction and losses. Such being the condition of the industry, the obvious remedy of combination has generally been clutched at by the producers, and it is a significant thing that the agreements among them are from the beginning directed quite as much toward the restriction of output as the fixing of prices. The restriction of output is, in fact, the crux of the whole problem. The ingenious way in which this was accomplished in the anthracite coal fields of Pennsylvania, by a combination of railroads interested in coal mines to limit the railroad shipments from each mine, is a matter of common knowledge, and it has been imitated in other parts of the country.

Once, however, combination is achieved, the tendency of the producers, if left to their own devices, is to go to the other extreme, both in restricting production and raising prices. There is not much doubt that, if all the reserves in our great coal fields and ore fields were opened up for operation to anyone who would pay a royalty equal to the intrinsic advantage (economic rent) of the mineral rights in question, the prices of coal and ore in our most favored

producing districts would experience a very marked decline, and with them the values of the deposits. In other words, the very high prices which are demanded in some districts for coal and ore, and for coal and ore lands, are dependent, in a large measure, on the establishment of very large reserves, as well as the concentration of current production in a comparatively few hands, among which understandings, concerning the restriction of output, are easily and quietly effected.

The manufacturing industry does not involve the use of natural resources and so does not contain both of these competition-destroying tendencies. Possibly there are exceptions to the statement, particularly where water-power rights exist—but these only tend to emphasize the importance of the difference. On the other hand, for those in the manufacturing business who have already committed themselves more or less permanently to a particular branch of it by the investment of capital in works, etc., the conditions are to a considerable extent similar to those surrounding persons engaged in the mining business, in so far, that is, as that branch of manufacture is a business of diminishing costs.

Generally speaking, manufactures under the factory system involve diminishing costs, while those under the household system often have nearly constant costs. Diminishing costs is the very *raison d'être* of the factory in many branches of industry. Wherever there are considerable general expenses independent of output, the "burden expense" that must be added to the prime cost of labor and materials will always tend to give diminishing costs with increased output. It is a pretty safe assumption that when bonuses are offered to workmen for extra large output the object is to take advantage of this diminishing cost. One does not need to suspect Car-

negie, for example, of sporting proclivities in reading of the "records" formerly made at Homestead, or at the Edgar Thompson mills. It is interesting to note that to this fact, in connection with excessive competition, Carnegie himself attributed the development or combinations in manufactures. In an article in the North American Review in 1889, he wrote as follows: "It is worth while to inquire into the appearance and growth of Trusts and learn what environs produce them. Their genesis is as follows: A demand exists for a certain article, beyond the capacity of existing works to supply it. Prices are high, and profits tempting. * * * * * New partnerships are formed, and new works are erected, and before long the demand for the article is fully satisfied and prices do not advance. In a short time the supply becomes greater than the demand, there are a few tons or yards more in the market for sale than required, and prices begin to fall. They continue falling until the article is sold at cost to the less favorably situated or less ably managed factory; and even until the best managed and best equipped factory is not able to produce the article at the prices at which it can be sold. * * * * * As manufacturing is carried on today, in enormous establishments with five or ten mlilions of dollars of capital invested, and with thousands of workers, it costs the manufacturer much less to run at a loss per ton or per yard than to check his production. Stoppage would be serious indeed. The condition of cheap manufacture is running full. Twenty sources of expense are *fixed charges*, many of which stoppage would only increase. Therefore the article is produced for months, and in some cases that I have known for years, not only without profit or without interest upon capital, but to the impairment of the capital invested. * * * * * It is

in the soil thus prepared that anything promising relief is gladly welcomed. * * * * * Combinations— syndicates—trusts—they are willing to try anything. * * * * * Such is the genesis of 'Trusts' in manufactured articles."

It would take, indeed, a wide knowledge of the technique of many branches of manufacture to enable one to express an opinion as to the extent to which diminishing costs prevail in the manufacturing industry, and a very exact knowledge of a particular branch to tell in what degree it prevailed therein. Probably there is no such thing, generally speaking, as a final best unit of manufacturing plant; it all depends on the volume of business and the improvements in technique.

The great significance of diminishing costs in transportation is admitted on all sides, and by some who deny its existence in manufactures.

There is a branch of trade closely connected with both manufactures and transportation which is coming more and more under the influence of this factor,—namely, the distribution of commodities. Whether the distribution of commodities is affected in an important degree by this principle depends chiefly on the technique. It is impossible to consider this subject in detail, but it may be pointed out that it prevails in the most conspicuous degree in those systems of distribution which require elaborate equipments for transportation, storage, and sale. A good illustration is found in the fresh meat trade. A successful business today requires a large equipment of refrigerator cars, icing stations, and local "coolers" for storage. The plant involves a large expense, which can be born economically only by a large volume of sales. An even better illustration, perhaps, is found in the sale of illuminating oil. The elaborate mechanical

equipment used in the bulk distribution of this commodity, which includes storage tanks, tank cars, tank ships, tank wagons, and in some cases even pipe lines for refined oil, necessarily involves an enormous capital expense, which is made economical only with a very large volume of business. The cost of distribution per gallon diminishes rapidly with the increase in the volume of sales. These like other elaborate methods of distribution are generally calculated to serve more than one end, and to render more than one advantage. As means of obtaining a sure market for a commodity, as well as means for wresting away the business of rivals, they have important uses. The important fact for the present discussion, however, is that the distribution of commodities, like the manufacture of them, is often subject to diminishing cost with increased volume of business. This naturally tends to develop excessive competition, which may become destructive of all but the most powerful, if the competitors do not come to some agreement. In other words, the conditions are present for a natural monopoly.

It is a much simpler matter to state the causes of combination and monopolies than to discover the remedies for them, or for their particular abuses or defects.

Combinations and monopolies may be regarded, on the one hand, as things wholly bad, or on the other hand, as social phenomena producing effects in which good and evil are mixed. If the first view is adopted, we should seek to abolish combinations, either by direct prohibition, or by taking preventive measures looking to the removal of all the causes. If the second view is taken, we must first determine what are the evil results of combinations, and then consider what methods are best adapted to cure them—whether by removing the causes, or by applying

some antidote to the abuse. While there is a good deal of difference of opinion among well informed and disinterested people as to whether combinations are wholly bad or only bad in so far as they produce certain effects, there is naturally a general agreement in the opinions as to the bad effects. The principal evils or abuses, attributed to combinations, appear to be as follows:

1. The exaction of exorbitant prices from consumers.
2. The depressing of the prices of raw material, or the wages of labor.
3. Rebates.
4. Unfair competition.
5. Improper and fraudulent practices in the financial conduct of corporations.
6. Engrossing the natural resources of the country, or patented inventions, and making the control of them the basis for killing off competition, or for an extortionate price policy towards consumers.
7. Dumping, or selling commodities in export markets at lower prices than at home.

Formerly a good deal used to be said of the wastes which combinations and monopolies were guilty of, but less is heard today on this matter. This waste used to be attributed to the lack of competitive stimulus and the discouragement of small individual enterprises. The chief indictment, however, was the destruction or dismantling of plants which were found superfluous by the combination. It is quite evident, of course, that some of the abuses mentioned above, as commonly attributed to combinations and monopolies, exist also under conditions of active competition. Price cutting, railroad rebates, watered stock and dumping, for example, are phenomena quite as characteristic of the competitive régime as of the monopolistic, although such abuses

acquire a much graver import in the latter case. Exorbitant prices, on the other hand, may be regarded, in tendency, at least, as characteristic of the latter. Although selling prices are often higher at times under the competitive system, the tendency is for the prices under a combination or monopoly to exceed them on the average. The abuses of unfair competition, also, though frequently existing to some extent under free competition, are not generally of a very harmful character unless practiced by a concern with monopolistic powers. So, also, the engrossing of natural resources may be carried to a considerable degree by competing concerns, but this becomes of much more serious consequence when a combination or monopoly arises. When the process of absorbing natural resources has been carried very far, this is apt to be the result.

The first remedy that is ordinarily suggested for almost any kind of social abuse is a legal prohibition. If this plan is adopted two difficult questions must be answered: first, What is the exact offence that the law is to prohibit? second, Is a general prohibition of all kinds of combination and monoply capable of enforcement under the given conditions of public sentiment and business practice?

As to this last question, it must be considered that the business world generally regards great combinations, whether rightly or wrongly, as the natural and necessary development of trade, and declares in picturesque metaphor that "natural laws cannot be repealed by statute." A statute law, of course, is just as much a condition of economic development as any other circumstance—it may be an important or an unimportant one depending on a good many circumstances, but particularly, in countries with popular government, on the degree to which it com-

mands the support of public opinion. It is at least doubtful whether the drastic application of some of the penalties of our state anti-trust laws would be supported by public opinion.

There also appears to be a real difficulty in fixing the definition of the offence committed by establishing a combination or monopoly which will be satisfactory to the practical economist and the jurist. This has been found in Europe, where the legal conditions are much simpler than in the United States. Our difficulties are twofold, depending not only on the nature of the act, but also on our form of government. The people of the United States are in a peculiarly unfortunate position in attempting to regulate these matters, on account of the constitutional limitations of both state and federal goverments. The constitutional limitation on the federal government in regard to commerce is an unfortunate historical survival. While under the constitution the power of the federal government to regulate corporations is often spoken of as being limited to those doing an interstate business (and this is the purview of the Sherman Anti-Trust Law), yet as a matter of fact the power of Congress extends to various other subject-matters which would give it additional powers of control; for example, patents, post roads, etc. What is really needed is a revision of the constitution—a revision upward—whereby the organic law of the state, in this as in other respects, shall be made to meet the demands of modern industrial civilization by providing for the enactment of a general code of commercial and corporation law. This, it must be admitted, is at present a counsel of perfection..

The problem of defining the offence of combination or monoply must be left to the lawyer, if a general prohibition is to be the remedy. Modifications of the Sher-

man Act have been proposed in some quarters, looking to the legalization of reasonable agreements. As is well known the Supreme Court in the Trans-Missouri Freight Association case held that all agreements to fix railroad rates, whether the rates so fixed were reasonable or not, were in restraint of trade and prohibited.

Whatever may be thought of the plan for relaxing the severity of our federal anti-trust law, mentioned above, the history of the development of combinations and monopolies in the United States seems to indicate that a completely satisfactory remedy is not found in criminal prohibition. Until some better device is found, however, for checking combinations which are clearly obnoxious to the public welfare, it is probably better to have an imperfectly designed and sporadically applied prohibition than to have no defense at all. Furthermore, the general position may be taken, that, while great combinations may afford important advantages in developing and exploiting natural resources, or in organizing and cheapening the manufacture and distribution of commodities, and while in particular, they may give to this country a stronger position in international competition than it would otherwise possess, yet none of these considerations is of great weight in comparison with the necessity of preventing one class of the community from unfairly oppressing another, and of compelling all persons and corporations to be obedient to just laws.

A powerful and untrammeled government could easily abolish combinations or monopolies by a variety of measures without resorting to the criminal law, but it would be important to consider whether the remedy adopted might not be worse than the disease.. Remedies for combinations and monopolies should be applied with proper regard to the abuses and to the causes. Apart from

the questionable expedient of a simple prohibition, there is no panacea.

Consideration may now be given to particular remedies.

1. Where a monoply is the result of a legal grant, it could in general be abolished by simply repealing the grant (subject, of course, to any constitutional limitations); or, in any case, a recurrence thereof could be prevented by refraining from making such grants, or making them only under restrictions that would prevent any objectionable results. In the case of public franchises, it is already customary to limit the term of the privilege, and to exact guarantees for the just treatment of the public. A good illustration is found in the system sometimes used in fixing the price of gas, whereby the increase of dividends is dependent on reductions in price. An easily cured defect of the patent law of this country appears to be the right of the holder to prevent the use of the article absolutely. This right has been abused, especially by concerns seeking to establish monopolies. In this connection the possibility of controlling combinations through patent rights may be noted; for example, Congress might restrict the use, purchase, or sale of a patent by a combination or monopoly.

2. The cause for a very important class of monopolies is found in the exclusive possession or control of natural resources, of which water rights and mineral deposits are perhaps the most important examples. The most effective way to prevent monopolies from being established in this way is obviously to prevent such property rights from being acquired, at least permanently, by any private person or company. Where the community has the original title, mere business interest would suggest that grants of such rights without restrictions, or in perpetuity, were wasteful and improvident. In any case, in order to pre-

vent possible monopoly and exploitation of the public the state or federal government should retain or acquire such rights for themselves, to a certain extent, and eventually allow them to be operated by private interests under definite restrictions concerning the methods of operation and the conduct of the business, and, in some cases, by prescribing rates or prices. This is being done already in some western states with regard to water rights, but the principle is applicable to various natural resources. The constitutional limitations of the federal government are more serious here than in any other case, and this is particularly regrettable, because individual states can hardly be expected to adopt the policy most conducive to the welfare of the whole country in instances where their particular interests are not identical with it. Pennsylvania, for example, would make very little effort to prevent monopoly prices in anthracite coal, the bulk of which is sold outside of the state. In cases where such a policy was deemed impracticable it might be worth while to try the remedy, already applied in some German cities, and recently adopted in the English Budget, namely, to levy a tax on the unearned increment in value from such natural resources. Or, the state might, by eminent domain, take the reversion of such property after a fixed term, say thirty years, paying down now the present value of the reversion.

3. Undoubtedly the most prolific, and at the same time the most demoralizing, cause of monopoly in the United States has been favoritism—particularly in the railroad rebate or special rate. It is important to note that rebates are, to a very large extent, the result of excessive competition, and that with the permission of railroad pooling the chief incentive to this practice would be eradicated. Economists have long admitted that this is

desirable in conjunction with rate regulation, though they have been unwilling, generally, to advocate permitting it in other branches of business, partly because they did not always see that the causes tending to combination were similar in character, but chiefly because they did not think there was any feasible system of preventing abuse of such a privilege. The rebate is, of course, merely one of numerous devices intended to give one shipper an advantage over another. This is one of the causes which should be attacked in the first instance by prohibitory legislation and drastic penalties. In order to make such legislation effective the most thorough administrative supervision is necessary, including the power to examine books and papers, both of transportation companies and shippers.

4. Unfair competition may be the cause for the formation of a monopoly, as well as the means of maintaining it. This term is an elastic one, and includes a variety of practices, which may occur under a competitive, as well as a monopolistic, system. Here again criminal legislation would do much to end the abuses. A prohibition of local price cutting, and of bogus independent companies, seems feasible from the legal standpoint. The practicability of a law against local price cutting is illustrated by the actual Kansas law with respect to the sale of petroleum, and the legal propriety of a law of this kind has been vouched for by no less an authority than the present Secretary of State. Just what form a law against local price cutting should take cannot be adequately considered here; it might be desirable to limit it to cases where prices were cut below cost, or to cases where the prices were cut with the intention to injure a competitor. In this case, of course, some rule of evidence should be established which would make the law effective. In all cases due allowance

should be made for differences in cost of transportation, or for differences in manufacturing cost at different points of supply. The chief difficulty with such a law is in applying it to other commodities than staples of commerce, *i.e.,* to articles for which the measures of quantity and quality are not easily fixed. For this reason it could be successfully applied, perhaps, only to a limited number of specific commodities.

Excluding competitors from obtaining materials, facilities, etc., would need more particular analysis and definition than can be given the subject here. One competitor, for example, may be such an important purchaser, or otherwise so influential, that on his demand the seller may refuse to sell to anyone else. In some lines of business, chiefly, if not invariably, where some element of privilege enters, an obligation exists to supply all would-be customers. Illustrations are found in common carriers, warehousemen, innkeepers, companies supplying water, light, etc. The application of this rule to business generally does not seem advisable, although every case ought to be considered on its merits. The so-called commodity clause in the Hepburn Act, which aimed to prevent railway companies, in certain cases, from producing a commodity which was an important article of freight, and in which commodity they might, directly or indirectly, assure to themselves an unfair advantage over competing producers, is a good example, in purpose at least, of the sort of legislation needed in this direction. While common carriers could of course be prohibited from denying equal facilities, it would be quite another matter to compel combinations which held supplies of natural resources to sell them at reasonable prices. On the other hand, where patented machines or instruments were controlled by a monopoly, it might be required by

law to allow. the use of them to all under fair terms. This might involve some control over the system of rental, where that plan is used. The refusal to rent one machine, for example, unless others are also taken, should be prohibited; otherwise a patent, which contemplated a monopoly in a new invention, might lead to a monopoly in things already in common use.

Certain kinds of exclusive contracts are undoubtedly to be included in the term "unfair competition", and as such should be placed under the ban of the law. This has already been done in some states where certain exclusive contracts are declared to be in restraint of trade. Espionage, by corrupting the agents of carriers, of competitors or public employees, in order to obtain information of a competitor's business, and similar practices, should be prohibited also. Criminal legislation in this respect has been developed much further in Europe than in the United States.

5. Certain monopolies owe their existence, at least in a considerable degree, to superior efficiency. What can be done to prevent such a monopoly? A criminal prohibition against efficiency, or any attempt to hamper it unfairly, is certainly not to be recommended. To let such a monopoly loose on the public, and to trust simply to potential competition to keep it straight, is another answer to the problem, but not a very reassuring one under our present conditions and laws. Such a combination, if extensive enough, could probably by means of local price-cutting, and other means of unfair competition, discourage any would-be competitors, and, with a possession of a confirmed monopoly, turn and exploit the consumer. Where, however, a monopoly rested purely on superior efficiency, without the aid of unfair advantages, or unfair competition, and without the possession of

special franchises, or sole control of natural resources, it might be allowed to continue in its monopolistic course as a public utility, but it should be put under scientific observation as an economic curiosity.

6. A monopoly may be established simply on the basis of an agreement among, or consolidation of, all the producers of, or dealers in, a commodity. Including consolidations within the meaning of the term combination, it appears at once that the question as to a remedy for a monopoly of this kind depends on the question as to the remedy or remedies for the various sorts of combinations.

As combinations are often simply the forerunners of monopolies, their causes are often indirectly the causes of monopolies. On the other hand, the particular conditions that make monopolies possible are often the causes in some degree of combinations. Avoiding all repetitions on this account, the remedies for combinations will now be considered.

1. Of our state corporation laws, which encourage the formation of combinations by permitting unreasonable and often almost fraudulent capitalization, as well as a variety of abuses of promotion and underwriting, little need be said. There is not much difference of opinion as to the desirability and practicability of reform. If laws were passed by the states forbidding excessive capitalization and unreasonable contracts with underwriting syndicates, the incentive to and facilities for organizing trusts would be greatly diminished. Stricter rules about holding corporations and the permissibility of one company holding stock in another would make it possible to prevent many obnoxious combinations. The real remedy in this respect, however, is not to be sought from the state, but from a federal code of corporation law, and a system of federal corporations. Apart from curing the general

abuses of corporation law, already referred to, the federal government could set bounds to the system of promiscuous intercorporate shareholding, and also the absolute consolidation of corporations. In this manner the most important devices for forming a present-day trust would be brought under government control.

2. Some combinations depend on a protective duty. The remedy here is suggested by the cause, but, whether it will be regarded as worse than the evil intended to be corrected, will depend generally on whether the opinion is that of a free trader or protectionist. The protectionist's usual objection is, that the abolition of a protective duty may indeed destroy a trust in some cases, but that it will also destroy the outsiders who are competing with it. The Canadians have tried to solve this difficulty by providing that, when the commodity protected by a duty comes under the control of a combination, the duty on such commodity is revoked. Our most conspicuous and powerful trusts, with the exception of the Sugar Trust, do not depend to any important extent on the tariff. It might be opined in regard to the Sugar Trust that, instead of cutting out a useful article of revenue by abolishing the differential on raw and refined sugar, it would be a good thing to levy an internal excise tax to correspond. While tariff duties might well be abolished on certain commodities which are controlled by monopolies, it would be preferable, as a rule, to have this done by law rather than by administrative action. In any case, only grave injury to the public welfare should be the basis of changing the customs duties, when once they are properly adjusted to the national welfare and national industry.

The bounty system of protection, while it has distinct theoretical advantages in some respects, is not generally

favored, but it may be noted in this connection that it possesses the peculiar advantage that it may be withdrawn from the offending combination without injury to (indeed to the advantage of) the innocent outsider.

3. Combinations are sometimes called into existence to oppose trades unions. In olden times the English law forbade workingmen to combine in order to obtain better terms of employment. Such an act was termed a conspiracy. Today the laws of the land permit to workingmen an unfettered right of combination, but deny the same to the employers. The remedy for combinations among employers is not to be sought, however, in the prevention of combinations among laborers. The reasons of public policy, which have led to the repeal of laws against workingmen's combinations, are too broad in scope to be affected by their occasional relation to employers'combinations .

4. For combinations established to counteract other combinations, it is evident that a remedy aiming to remove the cause would be found only in a general remedy for combinations, which, in that case, would cure both cause and effect.

5. Combinations may arise from excessive competition. The only way to prevent such excessive competition would appear to be in restricting it by limiting the output or sales of each competitor, by fixing prices, or by some similar device. This, however, is just what combinations themselves aim at. In other words, the only cure for the cause is the thing to be prevented. Hence, combination established by the state is, strictly speaking, not a solution of the problem. Such a plan has already been tried in Austria-Hungary in connection with the sugar industry, and in some other instances.

6. Where a combination is formed simply because

an opportunity presents itself to control output and raise prices without any of the special causes of combinations already enumerated there naturally does not appear to be any single peculiar remedy, because the circumstances which make such a course of action feasible are generally various and complex. It is impossible, practically speaking, to try to discover or anticipate all the conditions or circumstances which may induce combinations. There must be, therefore, a residual class of combinations for which a general remedy is available. One remedy for this kind of combination would be that of the French law, which prohibits such combinations as result in giving to a commodity a price other than that which would result from free competition. As interpreted by the courts, this is a prohibition of such combinations as charge unreasonable prices. A criminal law, however, which has to be applied by tedious judicial processes is not a very satisfactory remedy for such abuses.

In considering the means of doing away with combinations and monopolies by eradicating the causes, we have already had occasion to note various abuses, which are causes as well as effects of such organizations. Particularly, we have considered the problems of unfair competition, promotion abuses, the engrossing of natural resources, and the means of preventing them. These are not really abuses which are peculiar to combinations. The same is true of dumping. The discussion of a remedy for this practice would take us too far, but it might be prohibited like local price discrimination, although the principles at the base of it are not the same. The principal abuse, however, namely, price extortion, is one that has still to be considered. Avoiding the direct regulation of prices, the effort has been made to reach a remedy indirectly by the application of the principle involved in the

prohibition of usury. But, as usury laws are seldom convenient in business affairs, so a similar limitation in respect to the prices of commodities, apart from those furnished by public municipal utilities, common carriers, and analogous enterprises, would not prove very practicable. In both cases, however, greater police power over petty dealings with the poorest classes might be beneficial. The remedy for this abuse is, in a certain sense, an answer to the whole problem, and it must be found in the remedy for those classes of combinations and monopolies which can not be corrected by the application of measures devised to remove the particular causes, or intended to neutralize them.

Our analysis thus far, as just intimated, has resulted in the conclusion that, while a number of the important causes of combination or monopoly may be removed by specific remedies, there is a number of causes for which no such remedy seems to be available. Of these classes of combinations requiring some general remedy, two are of special importance; first, those combinations which are induced by excessive competition, and, second, those which cannot be ascribed to any special cause or set of causes, but result from an opportunity to make an extra profit in that manner. Practically these two classes may not be easily distinguishable, but they are really quite distinct, both in cause and purpose.

The problem is to find a remedy for the necessities of industry, without laying the public open to extortion,—how on the one hand, to allow the producers to combine, when necessary to prevent cut-throat competition, and, on the other hand, to prevent them from exploiting the consumer by charging excessively high prices.

The trusts have grown so large, and have become so accustomed to the exercise of extensive and arbitrary

power, that remedies of publicity and moral suasion, which might have been of considerable effect if applied at the beginning, cannot be wholly relied on. What is necessary is a real and effective control.

The first, obvious idea would be to permit such combinations as were deemed necessary, but to establish some sort of a control over prices. Time does not permit a discussion of the merits or possibilities of this method. While we have already come to accept the power of the government to fix rates for the services of various municipal utilities, and even of the railway, the application of the same system to all lines of monopolistic industry does not seem desirable. The greatest difficulties are not those connected with a good understanding of the market, although the business man is apt to talk of these matters as great mysteries. The great combinations in recent years have prided themselves on keeping their prices unchanged during very great changes in productive activity and in general market conditions, and even when the country was in the throes of a panic. But, while the fixing of reasonable prices for coal, rails, illuminating oil, plug tobacco, or even fresh beef, is probably a much simpler matter than the determination of reasonable railway rates, the need for doing so is not the same. If necessary, the state could at the present day take over the operation of the railroads. For the direction of industry as a whole, however, the state is not ready, and no man can see far enough into the future to be sure that it ever will be.

Another answer to the problem would be for the government to become a partner in the counsels, if not in the business, of the combination. A vote in the board of directors and an insight into the most intimate affairs of the combination would undoubtedly greatly strengthen

the government's control, if the right sort of men could be obtained, but this device seems difficult and dangerous.

Allied to this idea is the proposal that the government should enter certain branches of industry to a limited degree, and, by becoming a factor in the business, exercise a moderating influence. This system prevails to some extent in Germany, particularly in the mining of coal and of potash. It is doubtful whether such a policy is worth while, if the object is merely price regulation. Where the conservation of natural resources is at stake, or the preservation of public security is affected, such action might be recommended.

A better solution would seem to be to permit certain combinations, but to limit profits. This is an old-fashioned remedy which has gone out of favor. One reason for this, undoubtedly, was the fact that adequate methods were not applied for its strict enforcement. A scheme which would appear to be worthy of consideration may be briefly outlined as follows:

Let such combinations as are licensed to do business be taxed at a rapidly progressive rate on their net profits above an exempted minimum—say 10 per cent of the net investment. The tax should be substantial from the beginning, say 10 per cent on the profits exceeding 10 per cent, but not exceeding 11 per cent; 15 per cent on the profits exceeding 11 per cent, but not exceeding 12 per cent, the tax rate increasing thereafter, in like manner, by 5 per cent on every 1 per cent increase in the rate of profit. On this basis the maximum profit retained by the corporation would be about 20 per cent, under which condition the state would get about 10 per cent.

Obviously the chief difficulty would be to determine the net investment. The subject is too large for a proper discussion here. Whether the cost of the property in

question or a physical valuation of it should be taken, or whether *tabula rasa* should be made of past offenses, and present book values used as a starting point, would make little difference in the long run. If proper bookkeeping methods were imposed on all companies, any inequalities in assessment existing at present would be comparatively unimportant quantities twenty years from now. If the companies in question were obliged to come to an understanding with the government on this subject, before doing business under such a license, it seems likely that, even now, a reasonably fair valuation could be agreed upon, without great expense or loss of time.

This plan, on the one hand, would leave to private interests the task of fixing prices, with sufficient incentive to strive for a profit, and, on the other hand, would set a limit to the exploitation of the public. It involves the recognition of combination as lawful in certain cases. This might be made by the grant of federal incorporation, or the issue of a license. Such a license would confer, of course, no monopoly. Probably it would involve to some extent administrative discretion, guided, of course, by established general regulations and laws. For the purpose of carrying out the law, a special organ of administration would be necessary. This organ should have, not only the supervision of the federal law concerning combinations, monopolies, and federal corporations, but also act as a licensing, tax collecting, and publicity office.

The various positive measures for the control of combinations and monopolies, which have been mentioned or discussed, do not exhaust the subject by any means, but indicate in a general way what might be done, if a thorough-going system of control was planned. Resumed in brief they are:

1. Restrictions in the grants and uses of patents and franchises.
2. Conservation and control of natural resources, including taxes on unearned increment.
3. Prevention of discriminations in transportation.
4. Prohibition of unfair methods of competition.
5. Provision for abolition or suspension of customs duties in certain cases, or for the establishment of corresponding excise duties.
6. Establishment of a system of federal corporations, under strict control, both as to management and consolidation.
7. Prohibition of unlicensed agreements or consolidations.
8. Establishment of a system for federal license and taxation of combinations.
9. Establishment of an administrative organ to supervise and enforce the laws, and to act as an agent of publicity.

In conclusion it may be pointed out that, if all these remedies were adopted and put into effect, there would still remain questions of policy in the administration of the laws which would be of vast importance to the welfare of the country. For example, the government would have to take a stand on the broad question as to how far it would permit concentration in industry. The adoption of a very thorough-going system of control does not commit the administration of the law to destructive, iconoclastic methods. It merely insures the supremacy of general welfare over particular private interests. The establishment of powerful concerns, which virtually acquired possession of the whole market, if they owed their position to superior efficiency, without the aid of natural resources or facilities not open to all competitors,

and if they pursued a fair business policy toward all competitors and consumers, would not be necessarily regarded as objectionable.

The general ideas at the basis of this scheme of control may be briefly summarized as follows: first, to remove all the conditions which impede free competition, or facilitate combination or monopoly; second, in those cases where free competition becomes destructive to allow the producers to combine, with safeguards for the public interest. It is not believed that the circumstances under which the licensing of combinations is contemplated would be a great temptation to those who did not really suffer from excessive competition. With a system of federal corporations and federal taxation and supervision of corporations, combinations by consolidation could be made impossible, and secret unlicensed agreements could be made ineffective, as well as dangerous to those who attempted them.

# THE SHERMAN ANTI-TRUST ACT.

VICTOR MORAWETZ.

It has been the fashion, at least in Wall Street circles, to condemn the Sherman Anti-Trust Act without reserve. It has been asserted that the Act embodies a reactionary attempt to arrest the evolution of modern business methods, and that, if enforced consistently, the Act would check our industrial progress and, by making it impossible to carry on business effectively, would restrain the trade and commerce which it was designed to protect. I believe that these views in great measure are due to misapprehension as to the meaning and effect of the Act and, perhaps, also in part to unenlightened self-interest.

The Anti-Trust Act contains two prohibitions. Section 1 prohibits contracts, combinations, and conspiracies in restraint of interstate or foreign trade or commerce. Section 2 prohibits monopolies and attempts to monopolize, and combinations or conspiracies to monopolize, any part of interstate or foreign trade or commerce. On their face, these prohibitions appear to enforce only established principles of the common law. Certainly they do not seem revolutionary, or in conflict with sound political and economic policies. But it has been asserted that the courts have construed these prohibitions as forbidding every contract or combination that in any degree diminishes competition, and that the Act thus construed would render unlawful and criminal many industrial contracts and combinations that are necessary to the successful conduct of business and that always have been

considered fair and proper throughout the civilized world. This is a mistake. The courts never have decided that industrial combinations are prohibited by the Act solely on the ground that they diminish competition, and the courts never have condemned as unlawful contracts and combinations that are necessary to the successful conduct of trade and commerce and that prior to the passage of the Act were deemed lawful and proper. It is true that there are dicta in some of the opinions of the judges which, taken alone, may furnish some basis for these criticisms and fears; but the mere dicta of judges are not binding as precedents. Only actual decisions control in future cases, and there are no actual decisions that the Act has any such effect as has been asserted.

The decisions relating to combinations of railway companies involve a principle which does not apply to combinations of manufacturers, merchants, or others engaged in industrial enterprises. The railways are the principal highways of interstate commerce, and any action of the railway companies or of others that would block the transaction of commerce upon these interstate highways, or that would place an additional burden or charge upon the commerce transacted on these highways, necessarily would operate as a direct restraint upon the interstate commerce of the people of the United States. For this reason, in the famous Debs case, the Supreme Court decided that a combination or conspiracy of striking employees to stop the operation of the railways necessarily operated as a restraint of interstate commerce, and therefore was in violation of the Anti-Trust Act. In the Joint Traffic Association cases the Supreme Court went a step further and held that contracts or combinations among railway companies to fix and maintain rates upon competitive traffic operated as a restraint of interstate

commerce, because the natural and direct effect of such contracts and combinations was to maintain rates at a higher level than otherwise would prevail. If a combination to stop completely the transaction of commerce upon the interstate railways was a restraint of interstate commerce, as decided in the Debs case, the court very properly could hold that a combination of the railway companies to fix and maintain their charges or tolls at a higher level than otherwise would prevail (which was the object of the combination) was a restraint of interstate commerce. But it should be observed that in these Traffic cases the combinations were in restraint of interstate commerce, and unlawful *not* because they restrained commerce of the railway companies which entered into the combination, nor because they diminished competition in interstate commerce, but because their natural and direct effect was to increase the tolls or charges payable by the public upon all interstate commerce over the railways.

There may be a difference of opinion among railway men whether the prohibition of combinations to pool competitive traffic, or to maintain at a higher level than otherwise would prevail the charges upon competitive interstate traffic, was injurious to the railway companies. I, for one, do not think that it was, and I believe that my opinion is supported by subsequent experience. But certainly it cannot be asserted that the prohibition introduced a new rule of law or was revolutionary in its effect. Long before the passage of the Sherman Anti-Trust Act, such contracts and combinations were unlawful in many, if not all, of the states, and such contracts always were considered by the railway companies themselves as practically unenforceable. They were made principally to be broken. Besides, the desirability of such contracts, from

the point of view of the railway companies, in great measure has been removed by the enforcement of the Elkins Act against rebates.

In the Northern Securities case it was held that a combination to vest in a holding company a majority of the stocks of two companies owning parallel and competing lines that were highways of interstate commerce was in violation of the Anti-Trust Act. If, as decided in the prior cases, a contract or combination among railway companies to fix and maintain rates as to competitive interstate commerce was in restraint of the interstate commerce of the public, and therefore illegal under the Act, the Supreme Court clearly was right in holding that the combination in the case of the Northern Seecurities Company was illegal. But here again the combination was in violation of the Act *not* on the ground that it lessened competition in trade or commerce, but because its purpose and effect were to maintain rates at a higher level than otherwise would prevail, thereby imposing a burden or restraint upon the interstate commerce of the public.

Now, what has the Supreme Court actually decided in regard to industrial combinations? The Supreme Court has decided that a combination or conspiracy of trade unionists to boycott interstate trade in the products of a manufacturer or merchant is in violation of the Act because such combination or conspiracy would restrain the freedom of commerce between the manufacturer or merchant against whom the boycott is directed and his customers. The Supreme Court also has decided in a number of cases that combinations or contracts among manufacturers or merchants to monopolize any branch of interstate trade or commerce were prohibited by the second section of the Act and were unlawful. Contracts

and combinations to monopolize an industry or branch of trade were unlawful at common law but no adequate remedy existed for the enforcement of the common law rule. Was it revolutionary or unreasonable to enact a United States law that could be enforced in order to furnish an adequate remedy to prevent such contracts and combinations to monopolize interstate trade or commerce?

The Anti-Trust Act does not prohibit restraints of competition. The word "competition" does not appear in the Act. It prohibits only restraints of trade and commerce and monopolies or attempts to monopolize. The Supreme Court never has decided, and it is not likely that it ever will decide, that an industrial combination, whether in the form of a co-partnership, or of a corporate consolidation, or of a holding company, is in restraint of commerce within the meaning of the Anti-Trust Act if the combination merely diminishes competition among those combining without constituting a monopoly or an attempt to monopolize, and if there is no attempt, by a boycott or other unlawful means, to interfere with the freedom of commerce of others.

The question remains, what constitutes monopolizing or attempting to monopolize within the meaning of the second section of the Act. The word "monopolize" evidently was used in a popular sense, and not in a technical sense. The word "monopoly" in its popular sense implies such control of an industry or branch of trade as practically precludes competition and as will enable those combining to control and dictate prices. A combination that diminishes competition in a branch of trade does not create a monopoly if effective competition remains possible. A combination involving 90 per cent of a branch of trade might properly be held to create a mon-

opoly though a combination involving only 60 per cent could not in any fair sense of the term be called a monopoly. You will recall that Mr. Bryan proposed in effect to define a monopoly as a combination involving 50 per cent of a branch of trade. Such a rule would be quite arbitrary and would not apply fairly in all cases. I believe better results would be obtained by leaving it to the courts to decide what under all the circumstances of a given case constitutes a monopoly or an attempt to monopolize a part of interstate trade or commerce. But I think that Mr. Bryan had the right principle in mind. The test whether a combination should be prohibited is not whether it diminishes competition among those combining, but the test is whether it creates a monopoly or constitutes an attempt to create a monopoly in any branch of trade or commerce; in other words, whether it creates such concentration of control of an industry or branch of trade as practically precludes competition and confers the power to fix prices.

I know there are those who hold that the era of competition is past and that all laws prohibiting industrial monopolies should be repealed. This I believe is a shortsighted view. Our people became enterprising and resourceful and our country became rich and prosperous during the era of competition, and largely owing to the stimulus of competition. Competition and struggle are necessary to develop strong and resourceful men. The monopolization of the industries of the country surely would result in lessening the initiative, the resourcefulness. and the enterprise of our people. I know it is claimed that the monopolization of industries would result in economies of production; but you know, and I know, that if the monopolization of our industries were allowed by law, many monopolies would be created for the purpose

of destroying competition and controlling prices and profiting at the cost of consumers, or for the purpose of floating securities on the New York Stock Exchange, rather than for the purpose of securing more efficient and more economical methods of production. But whatever view be taken as to the economic value of monopolies, we must not forget our social and political conditions. The monopolization of the industries of the country inevitably would lead to a popular demand for strict governmental regulation of monopolies and probably would result in hostile legislation of a dangerous character. Therefore, I believe it to be best for the whole country, including those who are interested in our large industrial combinations, that the Sherman Anti-Trust Act should be kept upon our statute books, and that it should be enforced according to what I believe to be its true intent and purpose, namely, as prohibiting combinations to restrain the freedom of commerce of others and as prohibiting monopolies and attempts to monopolize, but not as prohibiting industrial combinations, however large, so long as they do not involve monopolizing, or attempting to monopolize, a branch of interstate trade or commerce.

## THE SHERMAN ANTI-TRUST ACT—DISCUSSION.

J. W. Jenks: As the discussion of Mr. Morawetz had to do with the legal aspects of the Sherman Anti-Trust Act, it had not been my intention, as I am not a lawyer, to comment at all upon his address. Persons not trained in the law frequently have unfortunate experiences when they attempt to enter a discussion involving legal technicalities. Inasmuch, however, as Mr. Morawetz, expressed some opinions of the nature of *obiter dicta* which are economic in kind, I wish to comment briefly upon them.

It seems to be his opinion that it is desirable to retain the Sherman Anti-Trust Act in order to prevent monopoly, and he seems to fear the monopolization of all industries. It is that point that I wish to object to. In my judgment, there is a tendency toward monopoly in certain industries, especially the so-called natural monopolies, this tendency coming from the nature of the industries themselves; but, on the other hand, there are very many industries, the majority of those in the country, that from their nature cannot be monopolized. Whereever it is possible for an industry to be started and production carried on economically with a small expenditure of capital or wherever success in an industry is dependent to a noteworthy degree upon the individual qualities of the workman, good taste, artistic judgment, etc., there is no liklihood of any monopoly that can control that industry. There cannot well be a trust of portrait painters, or even for that matter of decorators or dressmakers or milliners. Individual taste is so much of a factor in suc-

cess in any one of these industries that no one of the most successful producers will be willing to subordinate his judgment to the will of a group and to produce in a routine way. Moreover, in the case of products such as those indicated, the consumer will always be willing to pay a high price to secure the work of the individual whose taste suits him, and it would be found impossible for any combination to control or to monopolize the market.

I was particularly pleased with the frank, open-minded spirit in which Mr. Walker dealt with the question of monopoly. He recognized without any hesitation that there are certain industries in which the tendency toward monopoly is so strong that monopoly will certainly exist. He was also willing to recognize the fact that the line cannot be sharply drawn between the so-called natural monopolies and others ordinarily classed as capitalistic monopolies, in which the tendency toward monopoly comes from the decreasing cost of the product when production is carried on on a great scale.

It is always best in matters of legislation, as well as in business matters that are more purely private, to recognize established facts; and then, facing the facts, attempt to secure wise action. It has been the custom of our legislators, generally speaking, to assume that monopoly is always an evil and that the principle of competition is always good. I am quite ready to agree that the principle of competition is essential in industry, but I believe that the time has come to recognize in certain lines of industry, especially the so-called natural monopolies, that the principle of competition is not sufficient to protect the public, and furthermore that in these lines of industry we may not look upon monopoly as always an evil. We must, under such circumstances, simply recognize monopoly as a

normal condition for the industry concerned, and then, recognizing the monopoly, protect the public against its aggression by whatever form of regulation seems wisest. It may be, as in the case of street railways, that it will be best to fix prices and limit profits. In other lines of industry it may be, as Mr. Walker has suggested, that it will not be found practicable to limit prices but that we may accomplish something of the same result by taxing profits. We need still further experience to determine the best methods in all cases.

It is on this account that we may well welcome the new corporation tax soon to go into effect. The suggestion was made some years ago by the Industrial Commission that a federal tax on corporations might give information that would be of very great importance. A tax, especially on net incomes, will soon enable the federal government so to understand the conditions of industries of different kinds, especially in those establishments carried on on a large scale, that it can recognize those in which the tendency toward monopoly is so strong that it cannot readily or wisely be overcome. In such cases the government may recognize the monopoly and put it under control. It will also be able to recognize the industries in which the principle of competition may still normally be maintained and under proper conditions prove sufficient to protect the people without further interference on the part of the government.

The essential point to be kept in mind is that we should recognize openly and frankly industrial conditions, and, setting aside preconceived prejudices, so frame our laws and so shape our administration that these conditions will be so met that the interests of the public will be protected and promoted.

# THE PROGRESS OF TAXATION DURING THE PAST TWENTY-FIVE YEARS, AND PRESENT TENDENCIES.

EDWIN R. A. SELIGMAN

## I.

The subject that has been assigned to me is susceptible of a double treatment. It covers not only the actual changes of a fundamental nature in the practice of taxation, but also the development that has taken place in the governing principles. These, however, are, after all, two phases of the same movement, for the influence of practice and theory is reciprocal. On the one hand, the theories themselves represent an outcome of the facts, for fiscal theory, like all social theory, is but an attempt to present an analysis of the living forces at work in industrial society. And on the other hand, so far as fiscal theory deals with what ought to be, rather than with what is, it justifies itself only to the extent that its conclusions are approved by the popular mind, and thus become incorporated in the actual bone and sinew of the social organism. Fiscal theory and fiscal practice are the obverse and reverse of the same medal.

In the second place, the problem is not only specific but general. As citizens and patriots we are naturally most interested in the problems of our own country; but as scientists, our horizon is a wider one. Science cannot be fettered by bonds of national forging. It soars far above such limits. This is especially true of the scientific problems of taxation. It goes, of course, without saying that the fiscal institutions of every country, as all

its economic and social institutions, are colored by the particular environment. It would therefore be hopeless to attempt to reproduce in any one country, in all its minute details, the institutions of another country. But while we may concede the diversity of conditions, and the peculiarities of national life which must guide the statesman in elaborating any specific plan, it is equally true that there are discernible certain broad and general tendencies which are common to the life of all modern progressive societies, and which constitute the special field of the scientific observer. We shall see indeed that however much individual countries may differ from each other, and however confused the actual scheme at first blush may appear, there is, as it were, a silken strand which runs through the tangled skein, and which serves to give unity to what seems disorder.

And finally, we are struck, in this introductory survey of a quarter century's progress, by the fact that the science of finance is only slowly coming to its own, as compared with the almost revolutionary development in the general theory of pure and applied economics. This is due to the fact that the really difficult fiscal problems are of recent origin, and that fiscal science rarely grapples with problems until they have became acute. In Germany and in Italy the difficulties arose at a slightly earlier period; and we hence find a considerable scientific activity, along several lines at least, at the beginning of the period under discussion. In other countries, and notably in England, France, and the United States, the problems have been of much later growth, and it is accordingly only in the last few years that we find increasing attention paid to the underlying principles of tax adjustment. Even in Germany and Italy the rapid changes of industrial environment have, in many respects, shifted the

centre of gravity, and have recently engendered newer problems which are common to the whole civilized world. It is, however, not only in Germany as in France, in England as in Japan, that the fiscal problem is at the present time in the very forefront of political and social discussion. Especially in the United States it is a phenomenon of the most cheering import to note how the younger scholars are now beginning to address themselves to a consideration of these vexing problems. The progress that has been accomplished in the last quarter of a century is an earnest of the far greater development that is imminent in the immediate future.

II.

Before taking up the question of fiscal theory one fact must be noted as of paramount importance. It is the increasing significance everywhere being attached to administrative considerations. What is true more or less of all economic institutions is particularly applicable to our special problems. On all sides we are realizing the fact that the question of efficiency is scarcely, if at all, subordinate to the question of justice. Or, let me put it rather in this way: that however well justified, and however thoroughly calculated to promote the ends of justice a given scheme may be, unless its administrative features are so arranged as to make it workable, the beneficent aims are bound to be frustrated; and a half-way good measure which is administratively unobjectionable frequently turns out to be far superior to an ideal scheme which ultimately discloses serious faults in its administrative aspects. It is for this reason that we notice so much attention paid throughout the world in recent years to the administrative machinery, or to the purely mechanical aspects of the problem. In both England and Ger-

many, for instance, the past quarter of a century has seen a marked improvement in the administrative processes of the income tax, and especially in the former country has rendered palatable a system which was originally viewed with misgiving and distrust. Those authors—and they are not yet entirely extinct—who endeavor to draw a warning lesson from the income tax, derived from the speeches of Gladstone and the writings of an earlier generation of economists, are not alone blind to the teachings of the more recent movements of theory, of which we shall speak in a moment, but are, above all, deaf to the lessons of administrative development. Even in the United States, where great and fundamental changes in the very structure of taxation are impending, it is coming more and more to be realized that even our present system, inadequate and unsatisfactory though it be, is susceptible of a prodigious improvement on purely administrative lines. I have but to call attention to the remarkable progress that has been achieved in the administration of the tax on real estate in the city of New York, under the skillful supervision of the capable head of the Commissioners of Taxes and Assessments. Another more or less familiar example is the excellent work that has been done in the state control of the general property tax in commonwealths like Minnesota and Wisconsin, where the political powers have seen fit to call to their aid scientifically trained fiscal administrators. In fact, if there is any one thing which looms large in the history of the last twenty-five years in the United States, it is the increasing significance that is now slowly being attached to the problem of administrative efficiency. In this alone lies no small measure of our hope for the future. The administrative problem lies, however, beyond the confines of this discussion.

## III.

Assuming, then, that the problem of administrative efficiency is being successfully attacked, we must now address ourselves to those underlying principles which, after all, form the touchstone of ultimate fiscal success. If we take a broad survey of the theory and practice of the last twenty-five years' taxation, we shall be impressed by two fundamental reflections. The first is the emphasis that is being placed upon social rather than individual considerations; and the second is that even in so far as this is not true, there has been a decided change in our attitude to the individual norm in taxation. Let us consider these separately.

The first point is one which I have repeatedly accentuated in the last few years, and which, therefore, will call for less elaboration in this place. Whatever theory the older writers on taxation might have advanced as to the obligation of the individual to contribute to the support of government, they always tacitly assumed that the so-called direct taxes rested upon the tax payer; and in this scheme of equitable taxation there was manifestly no room for a system of indirect imposts. One of the most striking facts in the literature of taxation is that we search in vain for an adequate explanation, not to speak of justification, of a set of revenues which in almost every country forms the considerably greater part of the whole. To say, as did a well-known writer some years ago, that all indirect taxation is crooked taxation—importing into the term a moral as well as a physical connotation—is seriously to impeach the entire modern development. It is indeed true that the civilized world has abandoned the mediæval system of a multiplicity of indefensible and burdensome indirect taxes. But it is also true that their place has been taken by taxes which are

less burdensome and more defensible indeed, but none the less equally indirect taxes. One has but to run through the budgets of any modern nation, in order to realize what a very considerable share of the revenue is derived from so-called indirect sources; and in many cases the proportion is becoming greater, instead of less. Even in the United States, where the import duties and the internal revenue taxes form the almost exclusive source of national income, the trend toward indirect taxes even in the commonwealths is typified by the stock-exchange tax as in New York and the mortgage tax, which now constitute some of the most important sources of commonwealth revenue. And if we look at the admirable scheme by which Japan has been able to arrange her war and her *post-bellum* finances, we are equally struck by this preponderance of the so-called indirect taxes. Of the situation as it exists in France, in Italy, in Germany, and in England, we need not speak at all.

A theory of taxation which is competent to explain the modern development, must, therefore, put us in the way of comprehending the real principle underlying the indirect taxes. But it must do more than that. It must also put us in a position to understand the break-up of the general property tax and the change taking place in the taxation of mortgages throughout the country. Or again, it must enable us to explain how it is that in the great City of New York almost the entire tax revenue can be derived from an impost on real estate, without engendering a revolution among the particular class of property owners that is singled out for taxation.

The truth of the matter is that things are not what they seem; that the older theory that justice can be attained by taxing every man on all his property does somehow not work out, because, as a matter of fact, the

taxation of property is not necessarily taxation of the property owner. In other words, we are confronted by the great problem of the shifting, the incidence, and the effects of taxation. The individual taxpayer does not live to himself alone; he forms a part of a delicate and complex organism, and his interests are indissolubly bound up with those of his neighbors. The problem of taxation, like every problem of value, is primarily a social and not an individual problem. The striking change that has come over modern economics is the emphasis that has been put upon the social aspects of theory. If there is any one thing that is needed in the science of finance, it is the point for which I have clamored so insistently during the past few years, that the newer theory of taxation must proceed from the social, and not the individual, point of view. It is this point of view that is responsible for the more modern version of the theory of diffusion or absorption of taxation. It is this point of view which emphasizes the newer doctrine of capitalization of taxation. It is this point of view which unites the doctrines of absorption and capitalization in the wider theory that I have ventured to call the elision of taxation. Slowly we are beginning to realize—and by we I mean not alone the representatives of science, but the legislators and the courts—that to tax a particular piece of property is not necessarily to tax the property owner; that to attain justice in taxation it is not requisite to tax all kinds of property; and that in the case both of the so-called direct, and the so-called indirect taxes, the real problem is not as to which individual advances the tax, but as to what class of individuals ultimately pay the tax, or are either burdened or benefited by it.

In this respect, therefore, the progress of theory in the last twenty-five years has scarcely kept pace with the

unconscious revelation of the theory in the facts of actual life. A beginning has been made, but only a beginning; and the task of the next quarter of a century is to carry out into all its ramifications an elaboration and a more adequate comprehension of this doctrine of the social, rather than the individual, forces in taxation.

It may be claimed, however, that there still remains a field for the application of the individual theory of taxation, because it is undoubtedly true that in many cases, at all events, a tax is not shifted, but is really borne by the individual who pays it. Although we may grant this contention, it is, I think, susceptible of proof that even from the individual point of view a great change has taken place in the facts of modern taxation, which must inevitably react upon the theory; and that even this putative individual basis of taxation will, on closer examination, be found to be shot through with social considerations.

We come, in other words, to the great question which has long vexed the minds of scholars and taxed the energies of statesmen, as to what really is the test and measure of the obligation of the individual to contribute to the support of government. Even assuming that every individual bears the burden of what he actually pays to the state, how shall this burden be apportioned? Two answers, as is well known, have been given to this query. Yet each has failed to satisfy the rigorous demands of modern investigation; the one because it is plainly inadequate, the other because it has hitherto been incorrectly interpreted.

The answer that was almost universally given in the earlier stage of fiscal inquiry was that individuals should contribute to the support of government in accordance with the benefits or advantages which they derived from

government action. This has now become known as the Benefit Theory of taxation. The state was conceived of as a large joint-stock company, in which the individual citizens were shareholders; and each citizen was imagined to derive from the operation of this corporation a definite amount of profits in accordance with his investment in the enterprise. Since the operations of government were not designed to yield a dividend in actual money, the profits were conceived of primarily as being something in the nature of an intangible, but none the less calculable, dividend; and since, in the minds of those writers, the chief and well-nigh the sole function of government was to protect life and property, the quantum of benefit that each individual received stood in a certain proportion to his wealth. Taxes hence represent nothing but an insurance premium, or a periodic payment made by the individual in order to guarantee the continuance of his profits in this joint-stock enterprise. The theory of benefit or protection, although now almost completely abandoned by scholars, still lingers in the minds of some writers, and is found to a considerable extent in the tax decisions of the courts of Anglo-Saxon countries, where the force of precedent is so enormous.

The reason why the benefit theory of taxation has been abandoned is two-fold. In the first place, even on the assumption that the theory involves a correct interpretation of the relations of the individual to the government, a more rigid analysis discloses the fact that the benefits conferred by government on individuals do not stand in any such relation to wealth—whether to property or to income—as had been imagined. Even granting that the sole function of government is to protect property, it does not follow either that it costs the government twice as much to protect property of twice

the amount, nor that the smaller property owner feels that he is getting only one-half the benefits on his own property that the larger proprietor receives on his. Furthermore, it is obvious that the government protects persons as well as property, and the personal protection realized by a poor man is no less valuable to him than the personal protection afforded to a rich man. Still further, however, it soon became apparent that government is more than the mere watchdog of society, and that protection does not exhaust its functions. As soon, however, as we consider the other functions of government, the fallacy of the benefit theory becomes evident. For the advantages derived by individuals from government action are found to be in large measure not in direct, but in inverse, proportion to their wealth. The poor man sends his children to a public school, the rich man resorts to a private school; the poor man depends for fire protection or sanitation upon the efforts of government, the rich man avails himself of the services of the best appliances and the foremost experts; the poor man, in last instance, resorts to poor relief or state pensions; the rich man needs no such assistance. In almost every domain of modern governmental activity, it may thus be contended with some degree of truth that the direct benefits of state action are frequently in inverse proportion to the wealth of the individual. A theory which would practically result in placing greater burdens upon the poor man than upon the rich man must, therefore, be defective in one of its premises.

The second and chief reason, however, why the benefit theory of taxation was abondoned is that the whole foundation of political philosophy on which it was erected was recognized as insecure. The modern theory of political science rests upon the more organic conception of

the relation of the individual to the state; it recognizes the fact that the public collective wants are as much a part of the nature of civilized man as are his individual private wants; and that the essence of taxation is a moral, as well as a legal, obligation. The government, indeed, must do something for the community in return for the support which it receives. But this reciprocal obligation on the part of the government is not toward the individual as such, but toward the individual as a part of the greater whole. The special benefit is swallowed up in the common benefit. The special benefit to the individual is, in most cases, even not measurable; for the distingushing characteristic of modern civilization is the spread throughout the community of these impalpable, non-material results of good government which make for the common welfare, and especially for the higher life. In its ideal form at all events, the state must be likened not to a joint stock company, but to a family. The citizens are not stockholders but brethren, animated, if they are patriots, by the same ideals and by the same fine sense of coöperation in the common interest. Whatever the test of this moral obligation to contribute to the support of the whole may be, it is, in the state as little as in the family, assuredly not the measure of benefit received. Not only is the test wholly impracticable, but if it were practicable it would be completely inadequate.

It may be claimed, indeed, that this analogy of the state to the family is strained, and that cases do arise where the government undergoes a certain expense, and actually performs a definite service, for the particular individual, the benefits of which are separably and measurably calculable. Such a case obtains, for instance, when the government sells gas to the individual, or makes a charge for a certain permit, or demands that

the cost of an improvement which inures particularly to the benefit of a given set of individuals be borne, in whole or in part, by them. While this claim may at once be conceded, it must be pointed out that such payments do not come under the head of taxes, properly so-called. Even though there is still much confusion in the minds of our legislators and our judges, we cannot help realizing, as we look back upon the progress of the last twenty-five years, that one of our chief steps in advance has been a more proper classification of public revenues, and a recognition of the fact that taxes must not be confused with prices or with fees or with special assessments. What we have to treat of here is not the whole subject of government revenues, but the special topic of taxation. In a tax the point of chief importance is the prevalence of the common benefit, and the purely incidental character, if it exists at all, of the special benefit to the individual. Where the special benefiit to the individual is separately calculable, and is no longer a purely incidental result of government action, we are dealing with something that is not a tax at all.

IV.

When the benefit theory of taxation was abandoned it was replaced by the faculty or ability theory. This theory taught that the measure of general obligation to the support of government is, in the state as in the family, the capacity on the part of the individual to contribute to that support. This seemed to be an enlightening and comprehensive proposition. But, as in the case of the benefit theory, the difficulty arose when an attempt was made to analyze more closely exactly what was meant by the faculty principle. Perhaps the most important step in the analysis was taken by those writers

who, like John Stuart Mill, conceived the essence of faculty or ability to reside in equality of sacrifice. That is, they measured the ability of the individual to pay taxes by the amount of sacrifice that would be imposed upon him by the burden of the payment. I do not here speak of the various suggestions that have been put forward to ascertain the objective norm of this faculty so interpreted, further than to recall the gradual evolution from the test of expenditure to that in turn of property, of product, and of income. The important point for our purpose is that the subjective measure of the obligation was found to consist in sacrifice. It is true, indeed, that in recent times this explanation of Mill has been further elaborated, as, for instance, in the suggested substitution by Professor Edgeworth and by Professor Carver of the principle of minimum sacrifice, in lieu of that of equal sacrifice. But apart from the peculiar difficulties inherent in this newer version, upon which this is not the place to touch, we are confronted by the fact not only that fiscal practice does not conform to the general theory of sacrifice, but that the doctrine of ability or faculty itself has been assailed by recent thinkers as in some respects unsatisfactory.

While there is some force in the objections that have been urged, they are, in my opinion, not sufficient to invalidate the doctrine of ability or faculty, if correctly interpreted. Almost all the modern writers on finance, in Germany as well as in England and elsewhere, have regarded faculty too exclusively from the point of view of consumption. The whole sacrifice theory, whether in the equal-sacrifice or in the minimum-sacrifice version, deals only with this phase of the problem. It asks what is the burden that rests upon the individual in virtue of his payment of taxes; and how much of his property or

income remains for purposes of his own consumption. It is through and through an essentially consumption theory of finance. A more careful analysis of the doctrine, however, and one that is more in harmony with the actual facts, forces us to the conclusion that the consumption side of the theory must be reinforced by the production side. In estimating a man's faculty or ability to pay we must not alone think of the burden imposed upon him in parting with his property or income, but we must also consider the opportunities which he has enjoyed in securing that property or income.

But what, it may be asked, is the real import of this? The answer is obvious. Manifestly, as soon as we regard the production side of the problem, we are confronted by the phenomenon of privilege in all its manifold forms. If an individual secures his wealth largely through his own unaided exertions, that is one thing. If, on the contrary, his fortune is in great measure ascribable to the privileges conferred upon him by law, the situation is a very different one. The privileges render it easier for him to create and to augment his wealth, and the real sacrifice involved is the sacrifice of acquisition, as well as that of disposition. The older theory of faculty dealt only with the latter kind of sacrifice; the newer theory of faculty must include both kinds.

The doctrine of ability or faculty, as thus reinvigorated, is not only free from objection; it is, because more inclusive, superior to any of the rival conceptions that now divide the camp of fiscal thinkers. Our friends, the single taxers, for instance, who have done such yeoman's service in many phases of fiscal reform, commit a double mistake; first, in singling out a particular privilege as the only one to be reckoned with; and, secondly,

in erecting the principle of privilege into an independent and all-sufficient explanation of the relation of the individual to the government. Some of them, in the ardor of their reaction against the faculty theory, even go so far as erroneously to identify the privilege theory with the benefit theory, and thus revert to the old and discredited explanation. But even those who do not go to this length nevertheless see in the doctrine of privilege an all-embracing and adequate principle. As I have attempted to point out above, however, this view is essentially incorrect, because it looks at only one-half of the problem. It regards solely the acquisition of wealth, and is oblivious of the disposition of wealth. The older faculty theory, as it has been almost universally expounded, errs on one side of the question; the privilege theory errs to an equal extent on the other side. The only satisfactory solution of the problem is, while upholding the faculty theory of taxation as over against the old benefit theory, so to broaden and interpret the faculty theory as to make it include all of what is legitimate in the privilege theory, without incurring any of its extravagances.

This new interpretation of the faculty theory also enables us to explain the actual progress of events during the past quarter of a century. On the one hand, we have the great movement toward the income tax, a movement which is perceptible in the United States as well as in France and the other European countries. This movement is the direct result of the older elements involved in the faculty theory. It is a recent movement in the United States simply because the whole faculty theory of taxation is of comparatively modern acceptance. But the two newer modifications of the income tax which are now being so hotly discussed all over the world, the

principle of graduation, and the principle of differentiation, are, consciously or unconsciously, the result in part at least of the other side of the faculty conception. As I attempted, many years ago, to point out in the discussion of progressive taxation, the consumption side of the theory alone does not suffice for an adequate defense of the principle. And in the case of the distinction between earned and unearned incomes that has now come to the fore with such insistence in Great Britain as elsewhere, the justification of the higher rates on unearned incomes is to be sought in large measure in the principle of privilege, and especially the privilege of inheritance. It is the same privilege of inheritance which is responsible for the great development in recent years of the progressive and the collateral inheritance taxes all over the world; and it is a social privilege of a different but of not less important kind, which has brought into the forefront of political discussion in Germany, and in England, the increment duties on land. In the United States also the federal corporation tax and the corporate franchise taxes in our commonwealths are all of them referable at bottom to this newer idea of social or legal privilege as augmenting the faculty or ability of the taxpayer, whether individual or corporation. Far from working away from the theory of faculty, the events of recent years show a decided approximation to the doctrine as correctly interpreted.

We see, therefore, that the chief development of the last quarter of a century, in the practice as well as in the theory of taxation, has been the increasing emphasis laid upon the social point of view. In a great domain of taxation, as we have just learned, the individual point of view has been completely superseded by the social point of view, and the study of the incidence and effects

of taxation has emphasized to a continually greater extent the fact that the individual who pays a tax is by no means always the person who bears the tax. And secondly, as we have also seen, even in that remaining field of taxation where the individual taxpayer is the tax-bearer, and where the theory of faculty or ability to pay has been predicated as a fundamental principle, the individual element in this theory has been supplemented by the social element. The older conception of sacrifice was an individual conception; the newer idea of privilege is a social conception; these two conceptions have joined to form the modern doctrine of capacity or ability to pay.

Thus, from every standpoint, the individual idea has been permeated with social considerations, and the theory of finance is taking its place side by side with the other economic doctrines, as forming an outgrowth of the modern application of social considerations to the older individual conception. Economics is now sometimes called Social Economics; the newer theory of finance might also well be called the Social Theory of Finance.[1]

## V.

No survey of recent tendencies in taxation would be complete, however, without some allusion to the changes that have been brought about by the question of various tax jurisdictions, and of the conflicts between them. In all modern nations we are struck by the attempt to adjust the fiscal relations of state and locality; and in all federal commonwealths we have the added complication of the adjustment between state and nation. What does the experience of the last twenty-five years teach us with

[1] This theory is not to be confused with the socio-political theory of taxation which is sometimes associated with the name of Adolf Wagner, and which has been elsewhere discussed by me.

reference to both the theory and the practice of these problems?

Let us take up first the question of the relation of general and local finance. Here we at once notice the obvious fact that the tendency everywhere is to confine the local tax to real estate. Originally, as is well known, all taxes were primarily local; and we therefore find local revenues derived from a whole category of imposts. Everywhere the general property or the general income tax formed a large part of the local revenue, and in earlier times it was supplemented by a code of taxes on consumption, a system which still survives in many cities of the European continent. When state taxes developed, they were either tacked on to the local revenue, as is still the custom in the United States; or where tax administration had become national, as in France and some other European countries, the reverse process occurred and local taxes were now tacked on to the state revenues. It is here now that we notice a most instructive evolution. I need not stop in this place to emphasize the great economic changes which rendered the general property tax of earlier days unfitting and inoperative. But I do want to accentuate the fact that has been lost sight of, that the reason of the decay and the disappearance of the general property tax all over Europe was not only the break-up of the original mass of property into its constituent elements, but also, to an equally great extent, the fact that the administration of the general property tax remained local, while the basis of the revenue derived from property was now becoming general. In other words, an important cause of the failure of the general property tax was the attempt to apply local administrative methods to what was now essentially fitted only for general administrative methods. Individual property and individual

income can, in modern times, not be localized; and therefore a local tax on general property or general income becomes increasingly difficult to administer. This is one of the two chief reasons why the general property tax is becoming a farce in the United States, just as it explains why it has long since disappeared practically everywhere else in the civilized world. But it also enables us to understand the reason why the modern income taxes, and even the property taxes where they exist, are based upon the broader, and not the narrower, administrative foundation.

What applies to the general property tax applies to many other general taxes. The one important category of revenue, however, to which this administrative shortcoming does not apply is the tax on real estate, and thus everywhere we find local taxation coming more and more to assume the form of a tax on real estate. In some countries, as in England and Australia, this is now the fact by law. In some places, like the more developed industrial centres of the United States, it is now virtually a fact by custom. In France, indeed, the movement has only just begun, but is quite perceptible, while in Germany the well-intentioned reforms of the early nineties have been in part blocked by the selfish but unreasoning opposition of the land owners, who do not quite realize the real economic significance of the process. In truth, with all the disadvantages and absurdities of our American system I should say that the system of local taxation in the United States, as it is fast developing in actual practice in the most advanced communities, is superior to that which exists in Germany or in France, and even in some important respects not inferior to that which is found in England. The trouble with our American scheme is that the facts are developing in spite of the law,

and not in accordance with the law. The tendency, however, throughout the world toward reliance for local revenues upon the real estate tax is not alone indisputable, but also in complete harmony with the newer theories of finance.

The other side of the problem, namely, the relation of state to federal finance, has come to the front primarily in great empires like Germany, Australia, Canada and the United States. In this country we are at the present time in the very throes of the discussion. As I have attempted recently to explain at some length,[2] when treating of our own local problem, the real considerations involved in the choice of revenues for conflicting tax jurisdictions are the considerations of efficiency, of suitability, and of adequacy. Into the further discussion of these subjects I do not intend here to enter. But one point calls for especial emphasis. The situation in the United States is far more difficult than that in most of the other empires mentioned, because of our system of constitutional restrictions. The older I grow and the more deeply I work into our economic and fiscal problem, the more seriously do I question the value of our much-lauded system of constitutional restrictions, at all events as applied to the problems in hand. We see the embarrassments on all sides. All the other countries have been able, for instance, to rid themselves of the general property tax, while we shall have to devote many an arduous year to the effort to overcome the initial restrictions in most of our state constitutions. And so far as this particular problem of the relation of federal and state finance is concerned, the much greater progress that has been shown by our Canadian neighbor, not to speak of some of our friends across the seas, is due to their happy

[2] "The Relation of State to Federal Finance," in *North American Review,* Nov. 1909.

immunity from the dogma of state rights. Simply because of the accident that when our constitution was formed the separate states were independent and jealous of each other, we have embedded into our constitution the theory that all rights not expressly granted to the national government are reserved to the states. Yet immediately across the border we have a nation which is today more than twice as populous as was ours when the constitution was framed, and which in no distant future is bound to become as great and as mighty an empire as our own; and yet Canada has prospered on just the reverse theory, namely, the theory that the rights not granted to the states are reserved to the national government. Under this system Canada is solving not alone her fiscal problems, but many other economic problems, in a far more successful way than are we. And what is true of Canada is true, in a large measure, of the other great federal states. We have shackled ourselves with bonds which now cramp and bind our well-rounded development. We have erected into a fetish of so-called state rights or local self-government, a theory which the successful career of other Anglo-Saxon empires has shown to be unnecessary and embarrassing. The experience of the last twenty-five years, if it conveys any lesson at all in fiscal as well as in economic matters, teaches us that our whole constitutional theory deserves considerable overhauling.

Putting these considerations into practical form it means, as I have attempted elsewhere to indicate, that the income tax of the future in this country is to be a national income tax, and not a state income tax; and that so far as the corporation tax and the inheritance tax are concerned, the almost insuperable obstacles to overcoming the difficulties of interstate conflicts of tax jurisdiction may be removed by a national supervision

of the taxes imposed by the states, or by some scheme whereby the taxes in question will become national, so far as the methods of assessment are concerned, even though the proceeds may be apportioned in whole, or in part, to the separate commonwealths. In some way or other the legal facts must be made to conform to the economic facts. In some form or other the structure of government must be put into harmony with the content of economic life.

The last quarter of a century, therefore, which has seen such enormous changes in the economic basis of society, is bringing about equally vast changes in the theory and practice of taxation. Summed up in a few words, this movement means, on the one hand, the reconciliation of efficiency with justice, or rather the attainment of justice through efficiency; and, on the other hand, it means the correlation of the older individual and the newer social elements in the problem. The struggles over the budget in England, over the income tax in France, over the revenue code in Germany, are all of them symptoms of this newer spirit. And in the United States the effort to abolish the iniquitous general property tax; the attempt to secure a separation of the sources of state and local revenue; the endeavor to hold individuals and corporations up to their obligations to the treasury; the movements to modify our system of import and internal revenue duties, and to supplement them by an income tax; and above all, the tendency toward the spread of the inheritance tax and the incipient discussion as to the applicability of the theory of unearned increment to land taxes,—all of these but emphasize the lesson which I have sought to convey. The civilized world, in its rapid onward sweep, is fast realizing all these newer ideas in taxation. It remains for the student to analyze and to

explain the situation, and by clarifying the conceptions of statesmen as to the real import of these vast changes, to put them in a position to become the leaders of the people, who are the ultimate arbiters in this quest for justice and in this endeavor to reflect in fiscal institutions the highest aims of economic and social progress.

## THE PROGRESS OF TAXATION—DISCUSSION

FRANK L. MCVEY: It is impossible in the brief time allotted to me for the discussion of Professor Seligman's paper to deal with more than one phase of the question. I shall therefore confine my remarks to the practice of taxation.

To the observer a noticeable improvement in the administration of tax laws has taken place in many of the commonwealths of the nation, and with this change for the better have come some results which are to be seen in the more equal assessment of real property and in somewhat easier collection of taxes. The books have continued to discuss the worthlessness of the general property tax system, and at the same time have ignored the bettered administration that has come into vogue in the last few years. We have by no means gotten out of the laws already on the statute books all that can be secured from them through better administration, and it may be said that the progress of taxation will necessarily be in this direction rather than along the theoretical. No invective is made against theory in this statement, but the practical problem must necessarily be sensed before we can really form a theory about it, and this is the reason why practice bears such an important relation to the science of finance.

While there is a marked movement toward indirect taxation, so far as it applies to corporations, the old view regarding the justice and wisdom of the general property tax dies hard. The faculty theory of tax burdens probably prevails in most of our commonwealths, but the determination of ability to pay is felt to be measured by

the amount of property a man owns. This tendency to separate state revenues from local taxation is looked upon in some of the commonwealths as undesirable and really against public policy. The Oregon Tax Commission in its report for 1906 says "the general property tax is certainly elastic and self-regulating, which cannot be said of the indirect methods of raising revenues for state purposes." And the Wisconsin Tax Commission, while undoubtedly favoring certain indirect taxes, nevertheless believes that the assessment of all property in the state should be on a uniform basis, and all taxes levied for state purposes levied on the general assessment. In accordance with this view, it has steadily maintained that the assessment of the railway properties in Wisconsin and the levying against that assessment of the average tax rate was a more satisfactory and equitable system than that found in Minnesota and other states where gross earnings are taxed at a certain flat rate. Nevertheless, in Wisconsin, while the Tax Commission has authority over the assessment for state purposes, its assessment is not taken in the municipalities and counties for the basis of the local taxes, so that the irregularities of the local assessment still continue despite the work of the Tax Commission. In Minnesota, where the Tax Commission has authority over the entire assessment, the irregularities that are to be found in the case of the assessment of property in the different localities find their way into the return of taxation for general purposes, since the tax rate on local assessments includes the state rate as well. The tendency in this commonwealth is to develop special corporation taxes, which shall put the taxation of such organizations into the hands of the state and remove them from the authority of the local assessors.

In both of these commonwealths extended reports have

been made to the legislature. Many of the suggstions of the Wisconsin Commission have been accepted in so far as they apply to the betterment of the law, but in Minnesota practically nothing has come out of the suggestions of the Tax Commission so far as legislation is concerned. At the last meeting of the legislature in that state in 1909 suggestions were made for a county assessor system, for a change in the basis of assessment, for a state-wide method of taxing corporations, for modifications of the inheritance tax law, and for the extension of the gross earnings tax, so successful in the case of railways, to all public utilities corporations. Out of these suggestions, possibly because of the multitude of bills offered under the wide-open amendment of the Constitution, no legislation resulted.

The most notable piece of work done by the Minnesota Tax Commission was in the instance of the assessment of the iron ore properties of the state. This piece of work was based upon a rather far-reaching scientific method of getting at ore values. In the assessment of 1909, this Commission endeavored through the local assessors and county boards of equalization to secure a more satisfactory assessment. The result of the final assessment adjusted for the first time by the Tax Commission was received with general satisfaction throughout the state, but largely because the Commission was satisfied to make small changes here and there, except in the way of leveling up the assessment throughout the state. The basis of assessment in the law was the full value of the property, but in view of the practice which had existed in previous years, the Commission had asked the legislature for a reënactment of the clause. This, however, was not done, nor did the legislature feel that it could enact a forty per cent valuation, since it would mean a lower assessment

for the cities and a higher one for the country; but the law makers did call upon the Tax Commission to leave the matter as it stood. In this incident is the whole key to the situation,—the fear that existing conditions will be disturbed and some group called upon to pay more taxes.

In the report of 1907, on page 169, the Wisconsin Tax Commission says: "But the fact remains that for the past four years there has been no improvement in the state as a whole, but rather the reverse; that the average local assessment of today is not more than about two-thirds the full value, and omissions, or partial omissions and inequalities are the rule rather than the exception, or a very common occurence at least....................
"It may be doubted whether in the matter of uniformity between assessments there has been any material inprovement over the old régime, except as between districts within the same county, where an efficient supervisor of assessment has been employed."

No amount of theory is going to change this situation. The problem is fundamentally administrative, and only as the administration is improved in some directions and broken down in others will the legislation regarding taxation be materially modified in the different commonwealths. The time is coming in the near future, if it is not already at hand, when the tax as administered will be one thing and the law on the statute books another. By a slow, insistent process the administered law will become dominant, and when recognized will be made into statute law with some improvements. So, step by step, the tax law will grow better. But the confusion now existing is likely to be added to rather than decreased by the demands that are being made for a federal system of inheritance, income, and corporation taxes. In my opinion, the states will not yield their right to tax

corporation incomes or inheritances, since the burden of government will fall upon the commonwealths with increasing weight rather than with less. One has but to call to mind the cost of education, of building roads and bridges, of care of the insane, of the punishment of criminals, the maintenance of courts, and of the general socialization of governmental action, to have brought forcibly to the attention the fact that the states must have revenue quite as much as the federal government.

To raise the discussion and agitation regarding the taxing function of the federal government will retard rather than accelerate the solution of the problem as it is now found in the commonwealth. Clear conceptions of the incidence of taxation, of the meaning of the faculty theory, and of the real vital interest of the citizen in an equitable and fair system must be clearly indicated before we can hope for much betterment in the actual legislation on the statute books, though a good deal of improvement will be made as the administration and the personnel of the administrators changes for the better.

HENRY HIGGS: I regret that as an official of the British Treasury I feel precluded from complying with the invitation to make a public pronouncement upon Taxation in England or upon the Finance Bill which has given rise to so much discussion, financial and constitutional. I have found very great interest taken in the subject by American friends, but their criticisms of it are in almost all cases based upon misapprehension of the actual proposals.

It is difficult for me to offer any critical observations upon the subject now before you, before the discussion has proceeded further, as I am in complete agreement with Professor Seligman. Evidently taxation might be used

not only as an engine of finance, but also as a great instrument for affecting social relations in other directions. A striking example is the Australian federal legislation imposing customs duties upon, for example, agricultural implements, with a corresponding excise duty, and a rebate equivalent to the excise duty upon such articles produced in Australia under fair and reasonable conditions as to employment. This throws upon the courts the difficult tasks of determining whether this indirect regulation of labor and industry by the federal government infringed the constitutional rights of the states to which such regulations has been reserved, and also what is a fair wage in a given industry at a given time. No such extensive use of the taxing power has been attempted in England.

Upon the question whether a particular proposed extension of estate duties, for example, is open to objection as a tax upon capital, threatening to strike at the productive power of the country more seriously than if the same amount of money were raised by additional taxes upon income, I suggest that Professor Irving Fisher's luminous description of capital as a fund and interest as a flow, the one a lake or reservoir, the other a stream, points to the conclusion that it matters little if water is wanted whether we take it from the river or the lake so long as the supply is not drained dry.

# THE ASSESSMENT OF PROPERTY FOR TAXATION.

Lawson Purdy

## INTRODUCTION

The attempt to tax personal property in the same manner and at the same rate as real estate has failed everywhere. It should be abandoned. In most states all persons are required to list their own personal property. They do not do it and cannot be forced to do it. In some states the assessors guess at the amount and the persons assessed have an opportunity to demand a reduction of the assessment in accordance with their sworn statements. In neither case can the process be dignified with the name assessment. So long as the law remains, all that can be done is to enforce it honestly and endeavor, so far as possible, to prevent its use as a means of annoyance and oppression.

Real estate may be assessed with substantial fairness and uniformity. While the results depend in large measure upon the character and ability of the men who do the work, the law can promote the selection of fit men, can provide adequate supervision, and require methods which conduce to accuracy.

## ASSESSMENT LAW

The law should provide for an annual assessment. This is the law now in the State of New York and some other states. In some states the law provides for an assessment only once in four years, and, until a year ago, the law in Ohio provided for an assessment only

once in ten years. In a growing community, land increases so rapidly in value that when the assessment is not changed for several years, those whose property is stationary or declining in value pay vastly more than their share compared with those whose property has increased in value.

An annual assessment is necessary in order that the assessors may be employed continuously. No assessors can do satisfactory work until they have acquired experience. The law should provide, as in the City of New York, for the separate statement of the value of land. In the State of Massachusetts, the cities of New Jersey, the State of California, and various other states, the law requires the separate statement of the value of land, buildings, and total assessments. This is a good rule, but the better rule is like that of the City of New York, which requires two columns, instead of three. This saves clerical labor and tends to produce a better assessment by turning the attention to the fact that improvements are worth only the difference between the value of the land and the value of the property as a whole. If the assessor is directed by the law to value the building as a building, he may be tempted to regard the cost of construction in those cases in which the cost of construction bears no relation to the present worth of the building. The cost of construction is a good guide to the value of a new building suitable for the site on which it is erected, but an unimportant factor in the case of buildings which are no longer suited to the location.

In some cities, and in most rural towns, real estate assessment-rolls are still arranged alphabetically instead of geographically. In rural towns in the State of New York, the assessment of real estate of residents depends for its validity upon the correct designation of the own-

er. This system unnecessarily injects the personal element, occasionally invalidates the assessment, and worst of all renders a comparison of assessed values exceedingly difficult. When the assessment is a personal assessment against the owner by name, it is necessary to assess the property of non-residents on a separate roll. This frequently leads to such errors as to invalidate the assessment. The system has nothing to commend it.

The law should provide for proper maps and for the assessment of all real property by a system similar to that in the City of New York, and in some of the Western States. It is also in use throughout the Province of Quebec, Canada. In the City of New York this is called the "block system." It was first established to provide properly for the recording and indexing of instruments affecting land, by Chapter 166 of the Laws of 1890, and for the assessment of real estate by Chapter 542 of the Laws of 1892.

Briefly described, the block system of assessment in the City of New York is as follows: A map of the City was prepared under the direction of the commissioners of taxes and assessments, upon which was exhibited in sections and section numbers, and block and block numbers, the separate lots or parcels of land taxed within each of the city blocks. Each lot or parcel of land shown on the map is designated by a lot number. The lot numbers commence in each block with number 1 and continue numerically upwards for as many lots as are comprised within each block. The word "block" as used in this system designates a lot or parcel of land wholly embraced within continuous lines of streets or streets and water front, and may be more than a city square, but generally does not exceed 200,000 square feet in area. Blocks are numbered from number one consecutively upward. The

numbers never change and the boundaries never change. The city is further divided into sections the boundaries of which are unchanging, and which are numbered consecutively from one up; each section is about three or four square miles in area.

On the assessment-rolls the blocks appear consecutively and within each block the lots are placed in accordance with their location on the streets, commencing at one corner and proceeding continuously along each side of the squares which constitute the block. Any lot may be located rapidly and certainly, either on the assessment-roll or on the map. For the convenience of the assessors, the maps are bound in volumes of suitable size with a key map in the front; the scale of the key map being from 300 to 700 feet to the inch and the scale of the official map being 50 feet to the inch.

The block system has not yet been extended to cover the entire City of New York, but it is being extended as rapidly as the work can be done and the street system becomes sufficiently permanent to establish unchangeable block lines. In the territory not yet covered by the block system the maps are temporary and are called tentative maps. As these maps cover territory held in large parcels, much of it farm land, the scale somewhat varies, being from 80 to 200 feet to the inch. So far as practicable, however, the same system applies in the territory only tentatively mapped. Every lot is numbered, and its position is designated by a number on the map and by ward, plot, and map number. The length of all boundary lines is shown on the map in feet and inches, and on valuable lots of irregular shape the area is shown in square feet; on larger parcels the area is shown in lots or acres.

### ASSESSORS

Assessors should be employed continuously throughout the year and should therefore be assigned to a territory large enough to keep them busy. If so employed they could be paid adequate salaries. It is the ordinary rule in country towns that assessors, whether elected or appointed, are paid a small sum *per diem.* They work only a few days out of the year and accomplish the results that one would expect. It is probable that the best unit for assessment purposes is the county. This is the unit adopted in some Western States, but in the Northeastern States the town is practically always the unit. In many of the counties in the State of New York one-tenth as many assessors employed throughout the year could do the work better than the assessors who are now elected. In cities where the merit system of the Civil Service has been adopted, assessors should be selected after competitive examination, which should be designed with care to ascertain their fitness for the duties they are called upon to perform. When appointed in this manner they should be removed only for cause and after a hearing.

The assessors should be sufficient in number so that no one man should have more than about 10,000 parcels of real estate to assess. In a sparsely settled territory, where the parcels are large, and in congested centers, where the parcels are of irregular shape and values are high, the number should be less than 10,000, but need not ordinarily be less than 4000.

### ADMINISTRATION

The State Board of Tax Commissioners or a State Tax Commissioner should have the power to make rules for the guidance of local assessors, should be required

to inspect their work, and should be given power to enforce their directions even to the extent of requiring a reassessment of a whole assessment district or of part of an assessment district, whenever in their judgment such assessment may be necessary to secure equality within the district or equality between that district and others. A precedent for this power is contained in the Kansas law.

In some of the Eastern States it would require constitutional amendment to adopt such organization of assessors and supervisors as I have outlined. No constitutional change would be needed to provide larger powers of supervision in the State Board.

The work of assessors should be directed by persons who do not themselves make original assessments. Those who direct the work of assessment should be members of the board to review the work of the assessors, to hear complaints, and act upon them.

The fair assessment of real estate grows in importance with the growth of state and local expenditures. These expenditures have been increasing with tremendous rapidity during the last thirty years, and so far as we can see they are likely to continue to grow. Burdens which could be borne thirty years ago without much inconvenience, even when they were unevenly distributed, will become terribly oppressive as they grow heavier unless the distribution is equitable. The fair assessment of real estate is not a very difficult problem if the work is properly organized. It is impossible without proper organization.

Proper organization and efficient and intelligent supervision can produce excellent results. Good results will not be produced in any other way.

J. G. Schurman: You have taken me wholly by surprise. I came to this session of the Economic Association to listen and learn, as I attended the session yesterday afternoon at the Chamber of Commerce for the same purpose. Years ago I was, as you have said in presenting me, a student of Stanley Jevons in economics, and I taught the subject for a short time, and have always been deeply interested in it. But I recognize my incompetency in this age of specialization to offer any suggestions of value in the field of economic science to the experts here assembled.

I trust, however, that I may be permitted to express the satisfaction and delight with which I have listened to Professor Seligman's address. It was a most instructive sketch by a master hand of modern tendencies in taxation.

I do not presume to criticize anything Professor Seligman has said. He has shown us that taxes on real estate supply the revenues for municipal government and administration, and that state and general revenues are derived from other sources. And he has expressed his deepening conviction that in determining the suitability and validity of a tax, efficiency in collection is almost as important if not as important as justice itself. As Hamlet said in one of his moods, "There is nothing either good or bad but thinking makes it so", and Professor Seligman suggests that in systems of taxation there is nothing good or bad provided only the taxes levied are effectively collected.

Now there is a broader point of view from which this whole subject may be considered, a point of view which takes account of the sentiments of the community, as well as of economic science. And the sentiments of the community on such questions cluster about the idea

of justice. Undoubtedly taxes on real estate in the city are easily collected; but if, as I suppose to be the case, the landlord shifts the taxes wholly or in part upon the tenant, then you must consider whether according to the sentiment of the commnuity this is a just tax. We live in a time when there is a deep and widespread feeling that the accumulated wealth of the country is not bearing its fair share of taxation for the maintenance of government. One hears everywhere also complaints of the advance in the cost of living. And there are not wanting radicals with a revolutionary tendency who denounce our whole system of government as resting on favoritism to the wealthy and propertied classes. I submit that in any wise scheme of taxation you must take account of this sentiment. And I am a supporter of an income tax and a progressive inheritance tax, not only because they throw the burden of taxation on those who are able to bear it, but also because the masses of the people who have little of this world's goods recognize the justness of this arrangement.

Of course there is no great difficulty in collecting a progressive inheritance tax. I know there is greater difficulty in collecting an income tax. But I cannot on that account overlook the claim which the tax makes upon us in the name of justice. And I feel that, even if from the point of view of administration, Professor Seligman's contention that the collectibility of a tax is an important consideration, yet from the broader point of view of government justice is the first and supreme criterion. The organization which we call the State is, says Plato, justice writ large. In any event it cannot endure as a democracy unless it satisfy the popular idea and sentiment of justice and fair play.

John Martin: It is important that economists shall reach an agreement as to the incidence of taxation in cities. In New York for some time a controversy has raged concerning an alleged extravagance in city expenditures. Whatever the merits of the case as to waste and inefficiency in city departments, it is essential that reformers who are on the boundary line between the general public and professional economists shall be certain as to who pay the increasing taxes which must be levied for the enlarging activities of cities. It is generally thought that at least that portion of the tax which falls on land values, 62.5 per cent in New York City, is paid by the landlords and cannot be shifted on to the rent-payers. Some doubt whether rents would be less in New York if all taxation ceased. As a matter of fact, taxes were lowered considerably in this city by Mayor Low because he was able to transfer to the tax fund a large accumulation of money from the water fund; but no decrease of rents followed. Since the panic rents have gone down just when loud complaint is made that taxes have rapidly gone up. If taxes really fall on tenants, then a sharp halt will be called to the expenditures for multiform social services. While if the landlord pays the taxes, as the speaker believes he does in a growing city where he is able anyway to exact enlarging rents, then, unless the proceeds are absolutely wasted or stolen, the faster taxes are increased the more social justice is done. If cities spend efficiently on parks, playgrounds, baths, schools, health, and the like, the more they spend the better for the tenants. Practically, the tax levy is a refund of part of the rent made compulsorily by the landlord for the benefit of the tenant; and since in New York the landlord is able, taxes or no taxes, to obtain rents which on the whole and in long periods,

on account of the rapid increase in population, continuously increase, it is but just to secure for the community part of this increase.

T. N. CARVER: With the general argument of Professor Seligman's paper I find myself in complete agreement. However, there are some points already emphasized which seem to me to need further discussion. First, let me say that some of the problems of taxation are primarily problems of value, and belong to the economic theorist whose specialty is value, rather than to the student of general public finance. For example, the whole question of the shifting of taxation is a question of valuation. How does the imposition of a tax affect the value of the thing taxed? Until that question is answered we have no light on the problem of shifting; and, when it is answered completely, we have a complete answer to that question. This in turn involves an analysis of the cost of production, of the elasticity of production, of the nature of the utility curve or the demand curve for the thing produced; and it is utterly futile to attempt to discuss the question of the shifting of taxes without such an analysis as this.

Again, the question of justice, in some of its phases at least, requires a thoroughgoing analysis of some of the problems in value and marginal utility. For example, Mill's position that equality of sacrifice means the minimum sacrifice is demonstrably wrong. Nor is the erroneousness removed by the doubtful expedient of affirming that Mill did not mean what he said, but something entirely different,—that is, by saying that Mill did not mean equality of sacrifice, but equality of marginal sacrifice, which he never showed any indication of understanding at all. As a matter of fact, equality of marginal sacri-

fice would involve the minimum of sacrifice on the whole.

Again the question of justice in taxation cannot be satisfactorily answered until we have a pretty thorough understanding of the effect of the tax on production, that is, until we know whether the tax will repress production or not.

But most important of all is the difficulty of understanding what is meant by justice in taxation. It is frequently discussed as though it were a matter of individual obligation. How much ought the individual, if he were to pursue an ideal of right conduct, to contribute to the funds of the public? This of course is not really the question, though no book on taxation has ever failed, nor does Professor Seligman's paper fail, to confuse the issue at this point. The question of justice in taxation is the question of what the state ought to do, not what the individual ought to do. We might grant that the individual ought to contribute in proportion to his capacity, or his ability, or on some other basis; but if we find that the attempt of the state to levy and collect a tax on that basis would result in the repression of industry or in enhancing the cost of living, whereas another tax on another basis would not result in the repression of industry nor in enhancing the cost of living, we should have to conclude that these considerations ought to modify the action of the state in this matter. In other words, the obligation of the state in the matter of taxation, which is merely another way of saying what justice requires in the matter of taxation, is to be determined only by the results.

Again, there seems to be a certain amount of impressionism in the general proposition that values are becoming social, and that social considerations must be taken into account in determining questions of justice in tax-

ation. Did any writer ever in the history of the world contend otherwise? It has always been understood that it takes a number of people to make up a market, and that economic value arises from a general process of evaluation by a considerable number of people. In other words, the emphasis upon the word social in the discussion of values and of taxation adds absolutely nothing to the knowledge of the subject, or to the clearness of the discussion.

JAMES L. COWLES: "Our present system of making railway rates", says the Hon. Charles A. Prouty of the Interstate Commerce Commission, "is taxation without representation in its most dangerous form."

This railway taxation of the American public now amounts to over two and one-half billions of dollars a year, to over one hundred and fifty dollars a year for the average American family, and in its determination the taxpayers have no share. These taxes, moreover, are always based on the principle of "what the subject will bear", and they invariably discriminate in favor of the big town and the man with the big purse as against the small town and the ordinary citizen.

The two cent a mile tax to which, even under the most favorable conditions, the workman on a short job is always subjected, is an income tax of twenty cents a day—10 per cent on a daily wages of $2.00—even for a trip to and from his work and his home of but five miles. The railway tax on a trip of an hour's journey from his home would eat up half of his earnings. The common postage-stamp rate on carload freight over large areas of territory offers the big manufacturer and the big producer wider opportunities for the transaction of his business, but in local traffic freight and passenger rail-

way rates are almost always determined by distance, and with results almost as deadly to business as to labor. The growing differentiation of industry, requiring at least a continent for the purchase of supplies and the disposal of produce, as well as for the steady employment and the reasonable enjoyment of labor, makes the continuance of this system of transportation no longer endurable; and happily its remedy is at hand.

Railways are post roads and the post office is our mutual transportation company. Its only legal limitation is our will; its only physical limitation is the capacity of our public transportation machinery. We have but to extend the sphere of the post office over the general business of public transportation, to simplify postal classification, extend the postal weight limit and reduce postal rates, and the evils inherent in the present railway and express taxation of the public will disappear like the mist before the rising sun.

I suggest that the national government, acting under the Post Road Clause of the Constitution, shall take possession of our public transport system, and, guaranteeing to the holders of public transport securities a return on their investments equal to the average annual return of the past ten or fifteen years, shall provide for the support of the business by taxes determined by Congress on the postal principle.

Following the course adopted by Rowland Hill in the establishment of the Penny Letter Post of England in 1839, by making the very lowest existing rate for each class of service the uniform standard rate for all distances, the ordinary freight and passenger rates, under the proposed régime, will be about as follows:

RATES REGARDLESS OF DISTANCE.

FREIGHT.

Closed cars ......................... 5c per 100 lbs.
Open cars ..................... Not over 50c per ton
All freight to be insured by the government up to its full value on reasonable terms.

PASSENGERS.

Local trains .......................... 5c per trip
Express trains ........................ 25c per trip
Fast trains making very few stops ........ $1.00 per trip

Similar but higher tolls for special services—refrigerator cars, parlor cars, etc.—will complete the system of station to station rates. (It is to be noted that in the year 1907 the average railway freight tax of the United States was less than 65 cents.) A small toll—hardly over 10 hundred pounds per haul—and the tax per passenger trip was less than 65 cents., A small toll—hardly over 10 cents, possibly as low as 5 cents per hundred pounds of freight or per passenger—to cover the cost of collection and delivery, will give us a door to door service at low uniform rates at once for freight and passengers, as well as for intelligence, throughout our continental area, by land and lake and sea and river.

The substitution of this simple cost-of-the-service system of transport taxes, determined by Congress, for the present complex, value-of-the-service transport taxes, determined by private corporations for their private profit, will go far toward the quick arrival of the longed for millenium. Under the new service, those engaged in its operation will be insured reasonable wages, reasonable hours of labor, and a reasonable pension when their life work is done, through their representatives in Congress.

A. C. Pleydell: I wish to take issue squarely with Professor Seligman in his attack on the theory of taxation in proportion to benefits received. I believe this is the just principle and that it can be made to work in practice. The larger part of local revenues in this country is derived from the real estate tax, and this tax is administered on the "benefit" theory. We do not inquire whether the owner of real estate is deriving an income from his land, whether it is only partly improved, or whether he is using it at all. It is assessed at what it would be worth if he did put it to use, and the tax is levied thereon; and this is justified in the public mind by the fact that the expenditures of public money benefit the land regardless of the use which the owner makes of it, his income, or his ability to pay. Our special assessments to pay for streets and sewers are a further extension of the same principle.

That the "benefits received" theory is sound is practically admitted by the advocates of the "ability to pay" theory, when they take the position that taxes should be laid upon privileges. I fail to see the force, in this connection, of the distinction which Professor Seligman has drawn between privileges and benefits. Benefits frequently may not be privileges, but certainly privileges must be benefits, to have any value for taxation.

Professor Seligman's statement that the poor man receives a far greater benefit from the government than the rich man, hardly needs an answer. The protection of property and person is more essential to the rich than to the poor. History shows that the general security which the rich enjoy from the maintenance of peace and order is far greater than they could purchase as individuals. The poor man walking along Broadway without a dollar in his pocket does not need the electric lights, but they are essential to the man with a well filled pocket book.

Nine-tenths of the business of our courts, probably, is over property disputes, and the people who have property are rich—by contrast at any rate. Illustrations could be multiplied.

I agree heartily with what Professor Seligman has said, as to economic theory being behind the march of practical events. Take the reports of investigating tax commissions for the last twenty years. You will find in them many quotations from economic writers, a good deal from the works of Professor Seligman himself, but these quotations all relate to the break-down of the discredited general property tax—they are arguments forty years old.

In recent discussions of the new questions of taxation and finance and administration, there is no trace of the influence of present economic theory or of the economists as a body. A number of professors of political economy are doing good service in the field of taxation—men like Professor Seligman, Professor Bullock, and Professor Mc Vey, who are working as administrators or counsellors. But their influence and work is as citizens, as individuals, and not as representing any accepted doctrines of the economists, except for the rejection of the theory of the general property tax.

The reasons for this are many. Possibly the chief cause is that the economists have abandoned their old doctrines and have lacked the courage to formulate new ones. We hear that it is necessary to have more data—always more data, when we have now much more data than we know what to do with.

If the economists are to regain their influence over public affairs, they must take courage; follow the examples of the old writers, like Adam Smith and John Stuart Mill. Go back to the old processess of the deduc-

tionists. Formulate some principles, announce a hypothesis. Do not be afraid of making a mistake. Lay down rules to guide the next practical steps, and if when these are taken mistakes develop, rectify them; if new problems arise, meet them. Unless the economists strike out boldly and take the lead with some general principles that people can understand, they will be left hopelessly behind the procession of the practical changes in taxation that are coming.

Mr. R. R. Bowker: The economic theory which will be developed as the central and guiding principle underlying what, from the emphasis newly laid upon it, may be called the new taxation, will be the principle of social values arising from social coöperation. The land tax, the income tax, "death duties", corporation and franchise taxes,—commonly providing for a minimum exemption, differentiation of taxation, and progressive taxes—all involve a common principle or economic theory, that of taxing the surplus arising from social coöperation. The benefit, ability, and privilege theories of taxation, really converge and are reconciled. This larger theory of surplusage, will exempt land, labor, or business enterprises producing no surplus above the minimum, and will tax at progressively higher rates, the land, the brains, or privileged corporation, which by help of the social coöperation produces increasing surplus.

Royal Meeker: I owe an apology to this assemblage for presuming to speak on the subject under discussion. I am moved to do so because of the note of discord which threatens to mar the harmony of our economic concert. As my name implies, I am a man of peace and consequently am pained by the manifestation of warlike

disagreement among members of this Association. If Professor Seligman will permit me, I shall put into practice some of the teaching which he gives his classes and attempt a reconciliation of the clashing views held by himself and Mr. Pleydell. Perhaps Professor Seligman is unaware that among his former students he was known as the great reconciler. We sometimes went so far as to confer upon him the title of the reconciler of the irreconcilable, the harmonizer of the inherently inharmonious. In pointing out that there is really no difference between the ability theory and the benefit theory of taxation, I am merely following the precepts and the example of my much honored teacher. In practice these two theories work out to the same results. The ability to pay is identical with the benefit received and *vice versa*. These theories are only different aspects of the same thing; different ways of justifying the taking of private property for the use of the state. In practice both theories justify the state in doing anything it sees fit to do with the property of individual members of the state for the good of society. So when Mr. Pleydell says he disagrees squarely with Professor Seligman, he really expresses entire agreement with him.

And now laying aside my peaceful proclivities, temporarily, I wish to express my disagreement with Mr. Pleydell when he says that the theory of taxation has not kept pace with the practice. The leaders in the tax reform movement have been the economists, Professors Seligman, Adams, Bullock and many others. For every new practice in taxation there is a corresponding new theory which justifies and renders the new practice possible. In fact theory is necessarily in advance of practice in taxation. It takes some time to change the practice of the general property tax to conform with the

new theories of ability, benefit, or privilege. In this field of taxation theory precedes practice, and new practices are always the result of changes in theory.

BENJ. C. MARSH: The question of incidence in taxation and who pays taxes is exceedingly important from a practical as well as theoretical point of view.

In the last municipal campaign in New York it was constantly stated that high taxes make high rent. During the campaign I showed the Republican and Fusion candidate for mayor, Mr. Otto T. Bannard, an exhibit in which the conditions in the congested sections of the city were carefully portrayed, and called to his attention the fact that although $800 is the minimum upon which a man can support a family with three children under working age in Manhattan, and in most of the Bronx and Brooklyn, tens of thousands of families are trying to live on $600 a year, and suggested that every cent taken in taxes direct or indirect from families who are living or trying to exist on a deficit of $200 to $300 a year is robbery, and must ultimately be paid back to the families by public or private charity, if they are to maintain a reasonable standard of living and to be the most efficient producers and citizens. Mr. Bannard admitted this fact.

The economist may regard this proposition as unworthy of consideration, but anyone who realizes the desperate conditions in American cities today knows that there is no possibility of permanently improving conditions until we change their system of local taxation, and compel the enormous aggregations of wealth centered in these cities to pay their fair share of the value which the community has helped to create.

We cannot have a reasonable standard of living in

American cities until we adopt a system of taxation which will: (1) secure for the community part of the large increase in values of land earned by the community; (2) secure for the community part of the tremendous wealth gotten together largely through special privilege and unusual conditions.

This is not any plea for socialism, but merely a recognition of the justice of those systems of taxation which have worked out so successfully in other countries. The sooner we abandon our system of *laissez faire* and exercise a proper degree of control over aggregations of wealth, the sooner shall we be in a position to secure the fundamental conditions of justice to which we can lay no claim in American cities today.

K. K. Kennan: I have been asked to say a word regarding the taxation problem in Wisconsin. We have been proceeding along practical rather than theoretical lines, and, though some of our so-called tax reforms are rather crude and still in the experimental stage, it cannot be denied that our system as a whole has been greatly improved in recent years.

I quite agree with the last speaker in his distrust of all purely theoretical solutions of the taxation problem. Indeed if we are to wait for a perfect taxing system worked out and presented to us by those who approach the subject from the purely theoretical side, I fear that we shall hardly live long enough to enjoy that particular millenium. The whole problem of taxation is of such a character that nothing more than an approximate solution is likely ever to be reached. Some very costly experiments will be tried before the soundness of certain theories can be vindicated.

An encouraging feature of the situation, however, is

the extent to which the public is becoming awakened to the need of a more enlightened system of taxation.

For many years I had quite exceptional opportunities for observing the practical workings of our tax laws and became much impressed by the need of better administrative methods. With a view to attaining some practical results in this direction, I presented to the legislature of 1889 a bill for a tax commission. This bill received very little attention, being smothered in committee as a piece of absurd freak legislation. At the next session of the legislature the measure was more favorably received and the number of those who favored it increased from year to year until in 1897 it was passed, although without any appropriation. However, the funds necessary to carry on the work of the commission were easily raised by public subscription, and the demand for our first report was so great that a second edition of 5000 copies was ordered by the legislature. Largely as a result of that report, a permanent tax commission was established, with much broader powers and more ample facilities than had ever been conferred on a similar body in this country. The members of the commission were men of ability appointed for terms of ten years, and no limitation was placed upon the amount which they might expend.

I cannot take time to enumerate the many notable results which have been achieved largely through the efforts of that commission, but will simply say that, in my judgment, Wisconsin has made more genuine progress in the direction of practical tax reform in the past few years than any of the other states.

At the present time the question of a state income tax is being much discussed. A bill for such a tax was introduced last year and a committee appointed to investigate the subject. This committee has held numerous public

sessions and the predominating public sentiment would seem to be in opposition to the bill. But legislatures are uncertain quantities and we may have added to our problems that of trying to administer successfully a law which has been practically a failure in some twenty other states.

In conclusion I trust I may be permitted to express my high appreciation of the many excellent papers and addresses to which we have listened. I feel that it has been a great privilege to participate in this very notable gathering, and I wish to express my thanks in particular to those officers of the Association who have labored so faithfully to make this meeting a success.

EDWARD W. BEMIS: We may learn some lessons from the example of Wisconsin. That state, through its Public Utilities Commission, having occasion recently to value the Milwaukee street railways for the purpose of rate making, and having also occasion through its taxation, decided to have both valuations made by the same experts, and at the same public hearing. Professor M. E. Cooley of the engineering department of the University of Michigan, appearing as expert for the Chicago and Cleveland street railway in recent vlauations for the purpose of rate making and capitalization, recently testified in the Cleveland Street Railway case that this Wisconsin scheme had proved very "embarrassing."

Comparatively few would appreciate the extraordinary excellence of the system of assessing land values in Greater New York by the Board so ably presided over by Mr. Purdy. His methods are now being copied in Cleveland and in a large degree in many other cities of Ohio. Perhaps New York leads the world; she certainly leads America, in the excellence of her assessment of land values and improvements thereon.

Allen Ripley Foote: In Ohio we are now preparing to make a new assesment of real property. We have been appraising real estate for taxation once in ten years. The law was changed at the last session of the legislature, so that in the future we shall appraise it once in four years.

You can readily understand the difficulties of the problem we are about to undertake when you realize that we have no permanent boards of assessments, and the men who have been elected to perform this task, for the most part, have had no previous experience in such work.

In looking about for methods and assistance, we found that the system in the City of New York was one of the best in the United States. Mr. Lawson Purdy, the President of the New York Tax Department, has shown us every possible courtesy and given us valuable assistance. Mr. A. C. Pleydell came to the annual meeting of our State Board of Commerce and described the New York system. This aroused so much interest in the state that a short time ago the Auditor of State sent out a call for a conference meeting of all assessors, which he invited Mr. Pleydell and Mr. George J. Craigen, one of Mr. Purdy's deputies, to address. There is one assessor for each township, one for each village, and a board of five members for each city in the state, making a total of 2511. Fifteen hundred of these assessors attended the meeting which was held in Columbus two weeks ago. At this meeting Mr. Pleydell again explained the methods used in the field work of assessment in New York. The gathering was so large it was found advisable to hold two meetings in the evening in different places, instead of one large one. Mr. Craigen had an audience of nearly 500 city and village assessors, and over 800 township assessors attended the other meeting, where Mr. Pleydell was given the task of answering their questions.

You can understand the interest in these meetings when I tell you that when the hour of final adjournment arrived, although many of those in attendance expected to leave the city that night, an announcement was made that those who might care to remain until next morning could meet again for further information. At least 200 remained to attend the meeting the next morning, at which Mr. Pleydell and Mr. Craigen continued their explanations of the assessment methods in use in New York City. As a result of these meetings, and the general interest shown in the matter throughout the state, we expect to have the best assessment of real estate ever made in Ohio.

At these meetings, and since, the quest for information has been earnest, persistent and widespread. To satisfy this demand in the most practical and helpful manner, the Ohio State Board of Commerce has arranged with Mr. Pleydell, Mr. Craigen, and Mr. Purdy to compile a small handbook of tables and explanations, which it will publish for use of the Ohio assessors and will furnish to them without charge.

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1910

CONTENTS

Purposes of the American Economic Association
Constitution
List of Members
Minutes of the 22d Annual Meeting at New York City.

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# AMERICAN ECONOMIC ASSOCIATION.

The American Economic Association is an organization composed of persons interested in the study of political economy or the economic phases of political and social questions. As may be seen by examining the list of members and subscribers printed in this volume, not only are all the universities and the most prominent colleges in the country represented in the Association by their teachers of political economy and related subjects, but a large number of members come from among business men, journalists, lawyers, politicians, and others interested in the theories of political economy or, more often, in their applications to social life. There are, further, nearly two hundred subscribers, including the most important libraries of this country. The Association has besides a growing representation in foreign countries.

The first two meetings of the Economic Association in 1885 and 1887, and the meetings of 1897, 1898, 1900, 1901, 1902, 1903, 1904, 1905, 1906 and 1907, were at the same places as those of the American Historical Association; and in the last few years the American Political Science Association, the American Sociological Society and the American Association for Labor Legislation have met with the other two Associations. Joint sessions and less formal gatherings of the members of the Associations were thus held. In 1910 the meeting will be held in St. Louis, Mo. The annual meetings give opportunity for social intercourse; they create and cement acquaintanceship and friendship between teachers in different institutions, and bring into touch with each other students and business men interested in the social and economic problems of the day. The meetings aim to counteract any tendency to particularism which the geographical separation and the diverse interests might otherwise foster.

The Publications of the Association, a complete list of which is printed at the end of this volume, were begun in March, 1886. The first series of eleven volumes was completed by a general index in 1897. The second series, comprising two volumes, was published in 1897-99, and in addition thereto the Association issued during 1896-99 four volumes of Economic Studies. In 1900 a third series of Quarterly Publications was begun with the Papers and Proceedings of the Twelfth Annual Meeting, and has been continued since with ample amount and variety of matter. It is intended to add to these quarterly numbers, from time to time, such monographic supplements as the condition of the treasury and the supply of suitable manuscript may make possible. The *Economic Bulletin,* issued quarterly and devoted to bibliography and current notes, is also published by the Association.

The American Economic Association is the organ of no party, sect, or institution. It has no creed. Persons of all shades of economic opinion are found among its members, and widely different views are given a hearing in its annual meetings and through its publications.

The officers of the Association and the contributors to its publications receive no pay for their services. Its entire receipts are expended for the printing and circulation of the publications and for the annual meetings. Any member, therefore, may regard his annual dues either as a subscription to an economic publication, a payment for membership in a scientific association, or a contribution to a publication fund for aiding the publication of valuable manuscript that might not be accepted by a publishing house governed primarily by motives of profit, and that could not be published by the writer without incurring too heavy a burden of expense.

## *CONSTITUTION OF THE AMERICAN ECONOMIC ASSOCIATION.*

(As Revised at the Annual Meeting, Dec., 1905.)

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### ARTICLE I.

#### Name.

This society shall be known as the American Economic Association.

### ARTICLE II.

#### Objects.

1. The encouragement of economic research, especially the historical and statistical study of the actual conditions of industrial life.

2. The issue of publications on economic subjects.

3. The encouragement of perfect freedom of economic discussion. The Association as such will take no partisan attitude, nor will it commit its members to any position on practical economic questions.

### ARTICLE III.

#### Membership.

1. Any person interested in economic inquiry may, on the nomination of a member, be enrolled in this Association by paying $3, and after the first year may continue a member by paying an annual fee of $3.

2. On payment of $50 any person may become a life member, exempt from annual dues.

3. Foreign economists of distinction, not exceeding

twenty-five in number, may be elected honorary members of the Association.

4. Every member is entitled to receive, as they appear, all reports and publications of the Association.

## ARTICLE IV.

### Officers.

The officers of the Association shall be elected at the annual meeting and shall consist of a President, three Vice-Presidents, a Secretary, and a Treasurer, whose term of office shall be one year; six members of the Publication Committee and six elected members of the Executive Committee, whose term of office shall be three years, and who shall be so classed that the term of two members of each committee shall expire each year; provided that the office of Secretary and that of Treasurer may be filled by the same person. The Executive Committee shall consist of the President, the Vice-Presidents, the Secretary, the Treasurer, the Chairman of the Publication Committee, the ex-Presidents, and six elected members.

## ARTICLE V.

### Duties of Officers.

1. The President of the Association shall preside at all meetings of the Association and of the Executive Committee, and, in consultation with the Executive Committee, shall prepare the programs for the annual meetings. In case of his disabiilty, his duties shall devolve upon the Vice-Presidents in the order of their election, upon the Secretary, and upon the Treasurer.

2. The Secretary shall keep the records of the Association and perform such other duties as the Executive Committee may assign to him.

3. The Treasurer shall receive and have the custody of the funds of the Association, subject to the rules of the Executive Committee.

4. The Executive Committee shall have charge of the general interests of the Association in the interval between annual meetings. It may fill vacancies in the list of officers, and may adopt any rules or regulations for the conduct of its business not inconsistent with this constitution or with rules adopted at the annual meetings. It shall act as a committee on time and place of meeting, and perform such other duties as the Association shall delegate to it. A quorum shall consist of five members, other than the Vice-Presidents and the ex-Presidents.

5. The Publication Committee shall have charge of the publications of the Association.

## ARTICLE VI.

### Amendments.

Amendments, after having been approved by a majority of the Executive Committee, may be adopted by a majority vote of the members present at any regular meeting of the Association.

## LIST OF MEMBERS.

* Life Members † Subscribers ‡ Honorary Members

NOTE.—*The figures in parenthesis after the name of a member indicate the year from which dates his continuous membership.*

ABBOTT, EDITH, Hull House, Chicago, Ill. (1905).
ABBOTT, LYMAN, 287 Fourth Ave., New York City (1886).
ABRATANI, JIRO S., 529 W. 111th St., New York City (1902).
ADAIR, CHARLES R., Charleston, Ill. (1910).
ADAMS, ALTON D., Box 478, Worcester, Mass. (1905).
ADAMS, BROOKS, 229 Beacon St., Boston Mass. (1901).
ADAMS, CHARLES FRANCIS, South Lincoln, Mass. (1899).
ADAMS, HENRY CARTER, 1417 Massachusetts Ave., Washington, D. C. (1886).
ADAMS, JAMES TRUSLOW, Summit, N. J. (1908).
ADAMS, THOMAS SEWALL, Madison, Wis. (1900).
ADAMS, WILLIAM WISNER, 111 June St., Fall River, Mass. (1901).
ADRIANCE, W. M., 45 Wiggins St., Princeton, N. J. (1904).
AGAR, JOHN G., 31 Nassau St., New York City (1909).
AGGER, EUGENE EWALD, 248 E. 105th St., New York City (1902).
AIKEN, ALFRED L., 365 Main St., Worcester, Mass. (1909).
†ALBION COLLEGE LIBRARY, Albion, Mich.
ALDEN, JOHN, 1171 Tremont St., Boston, Mass. (1909).
ALDRICH, EDWARD I., 99 Bedford St., Boston, Mass. (1909).
ALDRICH, MORTON ARNOLD, Tulane University, New Orleans, La. (1897).
ALEXANDER, MAGNUS W., General Electric Co., West Lynn, Mass. (1909).
†ALFRED UNIVERSITY READING ROOM, Alfred, N. Y. (1903).
ALLEN, FREDERICK B., 132 Marlboro St., Boston, Mass. (1909).
ALLEN, FREDERICK L., 55 Cedar St., New York City (1909).
ALLEN, GEORGE HENRY HOWLAND, New Bedford, Mass. (1887).
ALLEN, JOHN ROBERT, Georgetown, Texas. (1891).
ALLEN, WILLIAM FREDERICK, South Orange, N. J. (1887).
ALLISON, H. O., The University Club, Urbana, Ill. (1909).
AMES, CHARLES HENRY, 110 Boylston St., Boston, Mass. (1900).
†AMHERST COLLEGE LIBRARY, Amherst, Mass.
AMRATH, J. W., 405 Clunie Bldg., San Francisco, Calif. (1909).

AMSTER, NATHAN L., 6 Hawes St., Brookline, Mass. (1909).
ANDERSON, FRANK BARTOW, The Bank of California, San Francisco, Calif. (1909).
ANDERSON, FRANK F., 1969 Marshall Ave., Merriam Park, Minn. (1910).
ANDERSON, JOHN M., Casselton, N. D. (1910).
ANDREW, A. PIATT, U. S. Mint, Washington, D. C. (1896).
ANDREWS, ELISHA BENJAMIN, Lincoln, Nebr. (1886).
ANDREWS, FRANK, Dept. of Agriculture, Washington, D. C. (1904).
ANDREWS, FREDERICK W., 253 Broadway, Providence, R. I. (1909).
ANDREWS, GEORGE F., 27 Landseer St., West Roxbury, Mass. (1906).
ANDREWS, JOHN B., Metropolitan Bldg., New York City (1910).
ANDREWS, MARTIN R., Marietta, Ohio (1909).
ANGIER, E. H., Quincy, Mass. (1909).
ARBUTHNOT, CHARLES CRISWELL, 10523 Wilbur Ave., Cleveland, Ohio (1904).
*ARMSTRONG, H. C., JR., Auburn, Ala. (1887).
ARNER, GEORGE B. L., Jefferson, Ohio. (1910).
ARNOLD, B. W., College Park, Randolph-Macon Woman's College, Lynchburg, Va. (1907).
ARNOLD, J. H., Glendale, Md. (1899).
ATKINS, EDWIN F., 10 Broad St., Boston, Mass. (1909).
ATKINSON, THORNTON CAMDEN, Wilmington, N. C. (1909).
ATWOOD, FRANK E., Carrollton, Mo. (1910).
AUSTIN, OSCAR PHELPS, Dept. of Commerce and Labor, Washington, D. C. (1902).
*AVERY, ELROY MCKENDREE, 2831 Woodhill Road, S. E., Cleveland, Ohio (1893).
AVERY, NOYES L., 47 Barclay St., Grand Rapids, Mich. (1904).
BABSON, ROGER W., 31 Abbott Road, Wellesley Hills, Mass. (1910).
BACON, CHARLES F., 151 Tremont St., Boston, Mass. (1909).
BACON, NATHANIEL TERRY, Peacedale, R. I. (1902).
BAGGE, GÓSTA ADOLPH, 19 Birgerjarlsgatan, Stockholm, Sweden (1905).
†BAHR'S BUCHHANDLUNG, Berlin W. 8, Mohrenstrasse 6, Germany.
BAILEY, WILLIAM BACON, 22 Lynwood St., New Haven, Conn. (1901).
BAILIE, WILLIAM, 82 Sudbury St., Boston, Mass. (1909).
BAILY, JOSHUA L., 32 South 15th St., Philadelphia, Pa. (1910).
BAIRMAN, WILLIAM M., *The Telegraph*, Macon, Ga. (1907).
BAKER, ALFRED L., 209 LaSalle St., Chicago, Ill. (1909).
BAKER, CHARLES WHITING, 220 Broadway, New York City (1900).
BAKER, MOSES NELSON, 220 Broadway, New York City (1890).
BAKER, RAY STANNARD, East Lansing, Mich. (1910).

BAKER, WILLIAM B., c/o Atlantic Ice and Coal Co., Atlanta, Ga. (1909).
BALCH, EMILY GREEN, Prince St., Jamaica Plain, Mass. (1896).
BALDWIN, ARTHUR C., 131 State St., Boston, Mass. (1909).
BALDWIN, FOY SPENCER, 12 Somerset St., Boston, Mass. (1899).
*BALDWIN, SIMEON EBEN, 69 Church St., New Haven, Conn. (1893).
*BALDWIN, SUMMERFIELD, 1006 Charles St., Baltimore, Md. (1887).
BALDWIN, WILLIAM H., 1415 21st St., Washington, D. C. (1905).
BANKS, ENOCH MARVIN, Gainesville, Fla. (1903).
BARD, HARRY E., Apartado 283, Lima, Peru (1910).
BARNARD, J. LYNN, 108 East Greenwood Ave., Lansdowne, Pa. (1909).
BARNETT, GEORGE ERNEST, Johns Hopkins University, Baltimore, Md. (1901).
BARNS, WILLIAM EDDY, St. Louis, Mo. (1887).
BARRETT, DON CARLOS, Haverford, Pa. (1895).
BARRON, CLARENCE W., Box 231, Boston, Mass. (1909).
BATCHELLER, *Mrs.* ALFRED H., 35 Congress St., Boston, Mass. (1887).
BATCHELLER, ROBERT, 35 Congress St., Boston, Mass. (1887).
BATES, CHARLES FITCH, 86 Linden St., Allston, Mass. (1909).
†BATES COLLEGE LIBRARY, Lewiston, Me.
BATTERSON, ELMER S., 4556 North Paulina St., Chicago, Ill. (1909).
BAUER, JOHN, 325 Dryden Road, Ithaca, N. Y. (1909).
BEAL, THOMAS A., Ephraim, Utah (1909).
BEARDSLEY, CHARLES, Clarks, Nebr. (1898).
BEER, GEORGE LOUIS, 329 W. 71st St., New York City (1892).
BEER, WILLIAM, Howard Memorial Library, New Orleans, La. (1896).
BEIDLER, FRANCIS, 115 Adams St., Chicago, Ill. (1909).
BELCHER, ALICE E., Milwaukee-Downer College, Milwaukee, Wis. (1910).
BELLER, WILLIAM FRANK, 51 E. 123d St., New York City (1892).
BEMAN, LAMAR T., 1939 E. 86th St., Cleveland, Ohio (1905).
BEMIS, A. FARWELL, Chestnut Hill, Mass. (1909).
BEMIS, EDWARD WEBSTER, 1911 Park Row Bldg., New York City (1886).
BENNETT, WILL EARNEST, 1173 Third Ave., Durango, Colo. (1910).
BENNEY, WILLIAM M., Cold Spring Harbor, L. I., N. Y. (1910).
BERARD, EUGENE M., 43 Cedar St., New York City (1890).
BERGLUND, ABRAHAM, Bureau of Corporations, Washington, D. C. (1906).
BERNHEIMER, CHARLES S., 184 Eldridge St., New York City (1910).
BERRYHILL, JAMES G., 1101 Pleasant St., Des Moines, Iowa (1890).
BESSE, LYMAN W., 21 Besse Pl., Springfield, Mass. (1909).

Best, Harry, 476 West 152d St., New York City (1909).
Bidwell, Raymond A., 35 Avon Pl., Springfield, Mass. (1910).
Bilgram, Hugo, 1235 Spring Garden St., Philadelphia, Pa. (1887).
Billquist, Carl Edward, 11 Broadway, New York City (1887).
Binney, Harold, 2 Rector St., New York City. (1910).
Bird, Charles, East Walpole, Mass. (1909).
Bird, Francis Henry, 25 Lebanon St., Hanover, N. H. (1909).
Bishop, Avard Longley, Yale University, New Haven, Conn. (1909).
*Bixby, William Herbert, 508 Colorado Bldg., Washington, D. C. (1888).
Black, James William, 56 Pleasant St., Waterville, Me. (1894).
Blackman, William Freemont, Winter Park, Fla. (1900).
Blackmar, Frank W., Lawrence, Kan. (1887).
Blake, Edwin M., 1 Liberty St., New York City.
Blake, John A. L., 37 Beacon St., Boston, Mass. (1904).
Blood, John Balch, 10 Post Office Square, Boston, Mass. (1901).
Boas, Emil L., 45 Broadway, New York City (1909).
Bodine, Samuel T., Broad and Arch Sts., Philadelphia, Pa. (1897).
‡Bodio, Luigi, Rome, Italy (1888).
Boerner, Arthur R., Cedarburg, Wis. (1901).
Bogart, Ernest Ludlow, Urbana, Ill. (1897).
‡Böhm-Bawerk, Eugen von, III Beatrix Gasse, 14 B, Vienna, Austria (1893).
Boissevain, Gideon Maria, 4 Tesselschadestratt, Amsterdam, Holland (1892).
Bolles, Albert S., Haverford College, Haverford, Pa. (1886).
Bonar, James, The Mint, Ottawa, Canada (1910).
Booth, George F., 78 Burncoat St., Worcester, Mass. (1909).
Borg, Sidney C., 20 Nassau St., New York City (1901).
†Boston Athenæum, Beacon St., Boston, Mass.
†Boston Public Library, Copley Square, Boston, Mass.
Bourn, Augustus Osborn, Jr., Hartley Hall, Columbia University, New York City (1909).
†Bowdoin College Library, Brunswick, Me.
*Bowen, Clarence Winthrop, 130 Fulton St., New York City (1886).
Bowen, J. Chester, Bureau of Labor, Washington, D. C. (1901).
Bowerman, George F., Librarian, Public Library, Washington, D. C. (1908).
Bowers, John Wilder, Portland, Me. (1909).
*Bowker, Richard Rogers, 298 Broadway, New York City (1887).
Bowman, Archibald, Room 601, 79 Wall St., New York City (1905).

Bowman, D. Arthur, Third Natl. Bank Bldg., St. Louis, Mo. (1909).

Bowman, Harold M., *The Globe*, 5 Dey St., New York City (1906).

Boyden, Arthur C., State Normal School, Bridgewater, Mass. (1909).

Boyden, Roland W., 60 State St., Boston, Mass. (1909).

Boyle, James Ernest, University of North Dakota, N. D. (1905).

Boynton, Arthur J., 1135 Ohio St., Lawrence, Kan. (1908).

Brace, Herbert M., Chronicle Bldg., San Francisco, Calif. (1909).

Brackett, Jeffrey R., 41 Marlborough St., Boston, Mass. (1904).

Bradford, Ernest Smith, Bureau of Corporations, Washington, D. C. (1910).

Bradley, Marie M., Bureau of Labor, Washington, D. C. (1910).

Brady, Arthur W., Anderson, Ind. (1909).

Brandt, Lilian, 105 E. 22d St., New York City (1909).

Breckenridge, Roeliff Morton, Bronxville, Westchester Co., N. Y. (1894).

Breckenridge, S. P., University of Chicago, Chicago, Ill. (1909).

Breedlove, Joseph Penn, Durham, N. C. (1904).

Brewer, Edward M., 27 Kilby St., Boston, Mass. (1909).

Bright, Robert S., 618 Stephen Girard Bldg., Philadelphia, Pa. (1909).

Brindley, John E., Iowa State Coll., Ames, Iowa (1908).

Brisco, Norris A., 527 W. 124th St., New York City (1906).

Bronson, Howard G., Box 19, Logan Hall, University of Pennsylvania, Philadelphia, Pa. (1909).

Bronson, Samuel L., New Haven, Conn. (1890).

†Brooklyn Public Library, 197 Montague St., Brooklyn. N. Y.

Brookmire, James H., 315 N. 4th St., St. Louis, Mo. (1909).

Brooks, Charles T., 808 Perry-Payne Bldg. Cleveland, Ohio (1905).

Brooks, John Graham, 8 Francis Ave., Cambridge, Mass. (1887).

Brooks, Robert Clarkson, Swarthmore, Pa. (1901).

Brough, Charles Hillman, Fayetteville, Ark. (1909).

Brown, Edward Thomas, Wolcott, N. Y. (1905).

Brown, Harry G., 691 Yale Station, New Haven, Conn. (1909).

Brown, Herbert Jenkins, Berlin Mills Company, Portland, Me. (1909).

Brown, Jacob F., 274 Summer St., Boston, Mass. (1909).

Brown, Plumb, 503 State St., Springfield, Mass. (1909).

Brown, R. L., Drawer 96, Austin, Texas (1894).

†Brown University Library, Providence, R. I.

Browne, G. Morgan, 44 Pine St., New York City (1901).

Bruce, Roscoe C., 1327 Columbia Road, Washington D. C. (1902).

Brummer, Leon, 277 Broadway, New York City (1901).
†Bryn Mawr College Library, Bryn Mawr, Pa.
Buckhous, M. G., University of Montana, Missoula, Mont. (1909).
Buckler, Georgiana G., W. North Ave., Baltimore, Md. (1906).
Buckler, William Hepburn, W. North Ave., Baltimore, Md. (1903).
Bucklin, George A., Jr., American Consulate, Apartado 279, San Luis Potosi, Mexico (1905).
†Bucknell University Library, Lewisburg, Pa.
Buettner, Karl F. W., 3634 Indiana Ave., Chicago, Ill. (1909).
†Buffalo Public Library, Buffalo, N. Y.
Bulkley, Erastus W., 683 W. 7th St., Plainfield, N. J. (1910).
Bullock, Charles E., Canton, Pa. (1909).
Bullock, Charles Jesse, Cambridge, Mass. (1894).
Burbank, Harold N., Hanover, N. H. (1910).
Burdick, Charles K., 200 N. Delaware St., Indianapolis, Ind. (1909).
†Bureau of Labor Statistics, Dept of Labor, Albany, N. Y.
Burgess, John William, 323 W. 57th St., New York City (1890).
Butler, Elizabeth B., Room 615, 105 E. 22d St., New York City (1908).
Butler, Mary Marshall, 263 Palisade Ave., Yonkers, N. Y. (1904).
Butler, William S., 90 Tremont St., Boston, Mass. (1909).
†Butte City Free Public Library, Butte City, Mont.
Butterfield, Kenyon Leech, Amherst, Mass. (1903).
Byrnes, Clara, Normal College, 68th St. & Park Ave., New York City (1910).
Calderon, Ygnacio, 1683 16th St., N. W., Washington, D. C. (1910).
Caldwell, Howard Walter, Station A., Lincoln, Nebr. (1886).
†California State Library, Sacramento, Calif.
†California, University of, Berkeley, Calif.
Callender, Guy Stevens, Forrest St. Route No. 50, New Haven, Conn. (1895).
Calvert, Joseph F., 123 E. 23d St., New York City (1908).
Campbell, Norman Madison, Colorado Springs, Colo. (1902).
Campbell, Peter F., 657 Broad St., Newark, N. J. (1910).
Campbell, Robert A., 436 Bruen St., Madison, Wis. (1908).
†Canadian Library of Parliament, Ottawa, Canada.
Cance, Alexander E., Massachusetts Agricultural College, Amherst, Mass. (1908).
Capen, Edward Warren, 38 Greenough Ave., Jamaica Plain, Mass. (1906).
Capper, Arthur, Topeka, Kan. (1910).

Carlton, Frank T., 1010 Porter St., Albion, Mich. (1906).
Carmalt, William H., 87 Elm St., New Haven, Conn. (1909).
*Carnegie, Andrew, 5 W. 51st St., New York City (1886).
†Carnegie Free Library, Allegheny, Pa.
†Carnegie Library (Periodical Dept.), Schenley Park, Pittsburg, Pa.
Carpenter, George O., Russell and Compton Aves., St. Louis, Mo. (1901).
Carpenter, William H., Columbia University, New York City (1909).
Carstens, C. C., 43 Mt. Vernon St., Boston, Mass. (1909).
Carver, Thomas Nixon, 16 Kirkland Road, Cambridge, Mass. (1893).
Case, Mills E., Public Service Commission, Tribune Bldg., New York City (1910).
Catlin, Warren B., 3220 S St., Lincoln, Nebr. (1909).
Cator, George, 803 St. Paul St., Baltimore, Md. (1901).
†Cedar Rapids Public Library, Cedar Rapids, Iowa.
Chaddock, Robert E., University of Pennsylvania, Philadelphia, Pa. (1909).
Chandler, Alfred Dupont, Brookline, Mass. (1888).
Chandler, Henry Alfred Ernest, University of Arizona, Tucson, Ariz. (1910).
Chapin, Robert Coit, Beloit, Wis. (1893).
Chapman, Sydney J., Burnage Lodge, Levenshulme, Manchester, Eng. (1910).
Chapman, William P., 154 Nassau St., New York City (1910).
Chase, Harvey Stuart, Room 1014, 84 State St., Boston, Mass. (1902).
Chase, Simeon B., King Phillip's Mills, Fall River, Mass. (1890).
Chatfield-Taylor, H. C., 100 Washington St., Chicago, Ill. (1910).
Chen, Huanchang, Hartley Hall, Columbia University, New York City (1909).
Cherington, Paul T., 24 Irving St., Cambridge, Mass. (1909).
Chew, Ny Poon, 809 Sacramento St., San Francisco, Calif. (1909).
†Chicago City Club, 228 S. Clark St., Chicago, Ill.
†Chicago Public Library, Chicago, Ill.
Chirurg, Michael, 532 Warren Chambers, Boston, Mass. (1909).
Chown, George Y., Kingston, Ontario (1906).
Chute, Charles L., 26 Jones St., New York City (1910).
†Cincinnati Public Library, Cincinnati, Ohio.
†Cincinnati, University of, Library, Cincinnati, Ohio.
†City Club of New York, Library of, 55 W. 44th St., New York City.
Claghorn, Kate Holladay, 81 Columbia Heights, Brooklyn, N. Y. (1901).

Clapp, Clift Rogers, 60 State St., Boston, Mass. (1909).
Clark, David Taggart, Williamstown, Mass. (1909).
Clark, John Bates, 635 W. 115th St., New York City (1886).
Clark, John M., Colorado College, Colorado Springs, Colo. (1909).
*Clark, John Spencer, 110 Boylston St., Boston, Mass. (1887).
*Clark, Martin, 91 Erie Co. Bank Bldg., Buffalo, N. Y. (1887).
†Clark University Library, Worcester, Mass.
Clark, Victor S., University Club, Honolulu, H. T. (1906).
Clark, Walter Ernest, 824 St. Nicholas Ave., New York City (1902).
Clarke, Enos, Kirkwood Station, St. Louis, Mo. (1901).
Clarke, Jeannette A., Winona Public Library, Winona, Minn. (1901).
Clarke, Samuel B., 32 Nassau St., New York City (1910).
Cleveland, Frederick Albert, 30 Broad St., New York City (1904).
†Cleveland Public Library (Reference Dept.), Cleveland, Ohio.
Clews, Henry, 17 Broad St., New York City (1909).
Clow, Frederick Redman, Oshkosh, Wis. (1894).
Clymer, Paul K., Ithaca, N. Y. (1910).
Cochrane, Alexander, 55 Kilby St., Boston, Mass. (1909).
†Coe Brothers, Springfield, Ill.
Cohen, Julius Henry, 15 William St., New York City. (1910).
‡Cohn, Gustav, Göttingen, Germany (1893).
Cole, William Morse, 35 Langdon St., Cambridge, Mass. (1908).
Collens, Arthur Morris, c/o Hay & Boynton, 60 Broadway, New York City (1910).
Collins, David Edward, 710 Crocker Bldg., San Francisco, Calif. (1904).
Collins, Francis W., 535 W. 142d St., New York City (1906).
†Colorado College, Colorado Springs, Colo.
†Colorado, University of, Library, Boulder, Colo.
Colt, *Mrs.* William L., Bronxville, Westchester Co., N. Y. (1910).
†Columbus Industrial Institute and College, Columbus, Miss.
Coman, Katharine, Wellesley, Mass. (1886).
Commons, John Rogers, University of Wisconsin, Madison, Wis. (1888).
Conant, Charles A., Morton Trust Co., New York City (1901).
Conant, Leonard H., 30 Broad St., New York City (1901).
†Connecticut State Library, Hartford, Conn.
‡Conrad, Johannes, Halle a/S., Germany (1888).
*Cook, Charles C., 2222 6th St., N. W., Washington D. C. (1893).
Cook, Howard Hamblett, Bureau of Corporations, Washington, D. C. (1899).

Cooley, Charles Horton, Ann Arbor, Mich. (1890).
Coolidge, *Mrs.* Mary Roberts, Dwight Way End, E., Berkeley, Calif. (1898).
Coolidge, Thomas Jefferson, 64 Ames Bldg., Boston, Mass., (1891).
Copeland, Melvin T., 65 Washington St., Brewer, Me. (1909).
Cornell, F. H., 717 Sterling Pl., Brooklyn, N. Y. (1910).
Costigan, George Purcell, 87 E. Lake St., Chicago, Ill. (1905).
Coulson, R. E., Bureau of Corporations, Washington, D. C. (1909).
Coulter, John L., University of Minnesota, Minneapolis, Minn. (1908).
Cowdery, Edward G., 157 Michigan Ave., Chicago, Ill. (1901).
Cowles, James L., 361 Broadway, New York City (1910).
Cox, Robert Lynn, 1 Madison Ave., New York City. (1910).
Craft, J. G., Hartwell, Ga. (1909).
Crandall, Billings F. S., Norwich, Conn. (1910).
Crandon, Frank P., Chicago & Northwestern Ry. Co., Chicago, Ill. (1909).
Crane, Charles R., 810 Fine Arts Bldg., Chicago, Ill. (1901).
Crissey, M. H., Tucson, Ariz. (1907).
Crocker, Frank L., 5 Nassau St., New York City. (1909).
Crocker, George Glover, 1016-1023 Old South Bldg., Boston, Mass. (1896).
Crook, James Walter, Amherst, Mass. (1892).
Cross, Ira Brown, Box 143, Stanford University, Calif. (1909).
Cross, William Thomas, Columbia, Mo. (1909).
Crowell, John Franklin, 17 W. 91st St., New York City (1888).
Cruikshank, Alfred B., 43 Cedar St., New York City (1909).
Crum, Fred Stephen, Prudential Insurance Co., Newark, N. J. (1894).
Crunden, Frank P., 2d and Gratiot Sts., St. Louis, Mo. (1909).
Culbertson, William S., 204 Yale Station, New Haven, Conn. (1908).
Cummings, Edward, 104 Irving St., Cambridge, Mass. (1895).
Curtis, F. Kingsbury, 126 E. 62d St., New York City (1909).
Cushing, John Pearsons, New Haven, Conn. (1894).
Cushman, Charles F., 35 Congress St., Boston, Mass. (1909).
Custis, Vanderveer, University Station, Seattle, Wash. (1904).
Cutler, James Elbert, 11322 Hessler Road, Cleveland, Ohio (1904).
Cutler, U. Waldo, 63 Lancaster St., Worcester, Mass. (1909).
Cutting, R. Fulton, 32 Nassau St., New York City (1894).
Cutting, William Bayard, Jr., 32 Nassau St., New York City (1904).
Dabney, Richard Heath, Charlottesville, Va. (1904).
Daggett, Stuart, University of California, Berkeley, Calif. (1906).

Daish, John Broughton, 723 15th St., N. W., Washington, D. C. (1887).
Daniels, Winthrop More, Princeton, N. J. (1894).
Davenport, Eugene, Champaign, Ill. (1909).
Davenport, Herbert Joseph, University of Missouri, Columbia, Mo. (1905).
*Davis, Andrew McFarland, 10 Appleton St., Cambridge, Mass. (1901).
Davis, Edward Hatton, West Lafayette, Ind. (1902).
*Davis, Horace, 1800 Broadway, San Francisco, Calif. (1887).
Davis, Nathaniel French, 159 Brown St., Providence, R. I. (1909).
Day, Arthur Morgan, Danbury, Conn. (1899).
Day, Clive, 44 Highland St., New Haven, Conn. (1909).
Day, Edmund E., Dartmouth College, Hanover, N. H. (1908).
Day, Edward A., 765 Broad St., Newark, N. J. (1910).
Day, Henry B., 321 Chestnut St., West Newton, Mass. (1909).
Day, James Frank, Fillmore, Utah (1908).
*Dean, Charles A., Dean Bldg., 60 India St., Boston, Mass. (1901).
De Bower, Herbert F., 315 Dearborn St., Chicago, Ill. (1910).
Deckard, Lex V., Okmulgee, Okla. (1910).
De Courcy, Charles A., Lawrence, Mass. (1909).
De Forest, Robert W., 7 Washington Square, New York City (1901).
Deibler, F. S., Evanston, Ill. (1908).
Deiches, Maurice, 271 Broadway, New York City (1909).
De Leon, Edwin, 52 William St., New York City (1909).
Deming, Horace Edward, 11-13 William St., New York City. (1904).
Deming, James Levi, 24 Everit St., New Haven, Conn. (1909).
Demuth, John Arthur, 254 Elm St., Oberlin, Ohio (1909).
†Denison University Library, Granville, Ohio.
†Deputy Minister, Dept of Labour, Ottawa, Canada.
Derr, Charles H., 10 Woosung Road, Shanghai, China (1909).
†Detroit Public Library, Detroit, Mich.
Devine, Edward Thomas, 105 E. 22d St., New York City (1893).
Dewey, Davis Rich, Massachusetts Inst. of Technology, Boston, Mass. (1886).
Dewsnup, Ernest Ritson, 812 West Hill St., Champaign, Ill. (1909).
Dickman, John William, Fayette, Iowa (1901).
*Dill, Arthur C., The Elms, Honeoye, Ont. Co., N. Y. (1907).
*Dill, James Brooks, 27 Pine St., New York City (1900).
Dimmick, Walter Warren, 220 Broadway, New York City (1909).
Dixon, Frank Haigh, Hanover, N. H. (1894).

Doane, S. E., P. O. Drawer N., Cleveland, Ohio (1910).
Dodge, Grace Hoadley, 262 Madison Ave., New York City.
Doherty, Henry L., 60 Wall St., New York City (1909).
Domeratzky, Louis, Bureau of Manufacturers, Washington, D. C. (1909).
Donham, Wallace B., 3 Ames Bldg., Boston, Mass. (1909).
Dorney, Leland Dale, 812 Catherine St., Ann Arbor, Mich. (1909).
Doten, Carroll W., 58 Garfield St., Cambridge, Mass. (1902).
Doughty, Edgar M., 16 Court St., Brooklyn, N. Y. (1910).
Douglas, Charles H., 120 Boylston St., Boston, Mass. (1909).
Douglas, Robert, 166 Essex St., Boston, Mass. (1909).
Doyle, Albert, Avon, Mass. (1909).
†Drexel Institute Library, Philadelphia, Pa.
Droppers, Garrett, Williamstown, Mass. (1902).
DuBois, W. E. Burghardt, Atlanta University, Atlanta, Ga. (1909).
DuBrul, Ernest Ferdinand, Bleecker & Melrose Sts., Cincinnati, Ohio (1895).
Dudley, Charles Benjamin, Drawer 156, Altoona, Pa. (1894).
Duncan, John C., University of Illnois, Urbana, Ill. (1907).
Durand, Edward Dana, Bureau of the Census, Washington, D. C. (1898).
Dyche, William Andrew, 1882 Sheridan Road, Evanston, Ill. (1909).
Dynes, John Howard, Bureau of Corporations, Washington, D. C. (1900).
Earp, Edwin Lee, Drew Theological Seminary, Madison, N. J. (1909).
Eastman, George, 350 East Ave., Rochester, N. Y. (1910).
Eaton, Allen B., Mountain Home, Idaho (1906).
Ebersole, John Franklin, University of Chicago, Chicago, Ill. (1910).
*Eddy, Sarah James, 4 Bell St., Providence, R. I. (1893).
Edgerton, Charles Eugene, 2852 Ontario Road, Washington, D. C. (1896).
‡Edgeworth, Francis Y., Oxford, Eng. (1893).
Edmonds, Franklin Spencer, Central High School, Philadelphia, Pa. (1894).
Edwards, Alba M., Bureau of the Census, Washington, D. C. (1908).
Egleston, Melville, 26 Cortlandt St., New York City (1909).
Ehrhorn, Oscar W., 15 William St., New York City (1909).
Eidlitz, Otto M., 489 Fifth Ave., New York City (1907).
Eliason, Adolph Oscar, Montevideo, Minn. (1902).

†Elizabeth Free Public Library, Elizabeth, N. J. (1910).
Elkins, Abram I., 170 Broadway, New York City (1909).
Elkins, Stephen Benton, Elkins, W. Va. (1886).
Ellis, Ellen Deborah, Mount Holyoke College, S. Hadley, Mass. (1906).
Ellis, George H., West Newton, Mass. (1909).
Ellwood, Charles A., Columbia, Mo. (1902).
Ely, Richard Theodore, Madison, Wis. (1886).
Ely, Robert Erskine, 23 W. 44th St., New York City (1903).
Embree, *Mrs.* Frances B., 27 Ware St., Cambridge, Mass. (1909).
*Emerick, C. F., Northampton, Mass. (1907).
Emerson, Elliot S., 395 Broadway, Cambridge, Mass. (1909).
Emerson, William F., 450 Main St., Longmeadow, Mass. (1910).
Emery, Henry Crosby, New Haven, Conn. (1894).
England, *Mrs.* Minnie Throop, 1109 O St., Lincoln, Nebr. (1906).
Escher, Franklin, 308 W. 97th St., New York City (1909).
Estabrook, A. F., 15 State St., Boston, Mass. (1909).
Evans, George W., Charlestown High School, Charlestown, Mass. (1909).
Evers, Cecil C., 186 Montague St., Brooklyn, N. Y. (1904).
Eversz, Ernest, c/o Eversz & Co., Chicago, Ill. (1910).
Ewing, John Gillespie, c/o Neal H. Ewing, Roselle, N. J. (1900).
Eyerly, Elmer Kendall, North Amherst, Mass. (1910).
Eyges, Leon R., 18 Tremont St., Boston, Mass. (1909).
Fairchild, Arthur Babbitt, Crete, Nebr. (1901).
*Fairchild, Charles Stebbins, Cazenovia, N. Y. (1896).
Fairchild, Fred Rogers, New Haven, Conn. (1904).
Fairchild, H. P., 183 Maine St., Brunswick, Me. (1909).
Fairlie, John Archibald, 1004 S. Lincoln Ave., Urbana, Ill. (1901).
Farnam, Henry Walcott, 43 Hillhouse Ave., New Haven, Conn. (1890).
Farquhar, Arthur B., York, Pa. (1901).
Farquhar, Henry, Census Office, Washington, D. C. (1896).
Fay, Sidney Bradshaw, Hanover, N. H. (1905).
Fayant, Frank H., Fort Plain, N. Y. (1909).
Feiss, Paul L., 113 St. Clair St., Cleveland, Ohio (1904).
Fell, Frank J., Jr., Broad St. Sta., Philadelphia, Pa. (1909).
Felter, Wm. L., 996 Sterling Pl., Brooklyn, N. Y. (1902).
Ferber, J. Bernard, Federal Bldg., Boston, Mass. (1909).
Ferguson, Henry, St. Paul's School, Concord, N. H. (1887).
Ferguson, J. Maxwell, Hartley Hall, Columbia University, New York City (1909).
*Ferguson, William C., Richmond, Ind. (1888).
Fetter, Frank Albert, Cornell Heights, Ithaca, N. Y. (1894).
Field, Arthur S., 10 College St., Hanover, N. H. (1906).

Field, James Alfred, University of Chicago, Chicago, Ill. (1904).
Filene, A. Lincoln, 453 Washington St., Boston, Mass. (1909).
Filene, Edward A., 453 Washington St., Boston, Mass. (1901).
Fillebrown, Charles Bowdoin, 77 Summer St., Boston, Mass. (1896).
Finley, John Huston, 139th St. and Convent Ave., New York City (1893).
*Fish, Stuyvesant, 52 Wall St., New York City (1909).
Fisher, George Harrison, 308 Walnut St., Philadelphia, Pa. (1888).
Fisher, Irving, 460 Prospect St., New Haven, Conn. (1894).
Fisher, Willard Clark, Wesleyan University, Middletown, Conn. (1890).
Fitch, John A., Department of Labor, Albany, N. Y. (1909).
Fitzpatrick, T. B., 104 Kingston St., Boston, Mass. (1909).
Fletcher, Bertram L., 49 Hammond St., Bangor, Me. (1910).
Flocken, Ira G., 325 Dryden Road, Ithaca, N. Y. (1909).
Flux, Alfred William, Board of Trade, Gwydyr House, Whitehall, London, S. W., Eng. (1901).
Foerster, Robert Franz, 71 Perkins Hall, Cambridge, Mass. (1909).
Foley, Daniel, Roxbury High School, Boston, Mass. (1910).
Folwell, William Watts, University of Minnesota, Minneapolis, Minn. (1886).
*Foote, Allen Ripley, 18 Board of Trade Bldg., Columbus, Ohio (1890).
†Forbes Library, Northampton, Mass.
Ford, Worthington Chauncey, Massachusetts Historical Society, Boston, Mass. (1887).
Fordham, Herbert L., Trinity Bldg., 111 Broadway, New York City (1910).
Foreman, Clarence James, 508 E. 4th St., Bloomington, Ind. (1909).
Forrest, J. Dorsey, 30 Audubon Pl., Indianapolis, Ind. (1900).
Forrester, James Grant, Bryn Mawr College, Bryn Mawr, Pa. (1910).
Forster, William, 59 Wall St., New York City (1909).
Foss, Herbert Collamore, 120 Boylston St., Boston, Mass. (1909).
*Foster, E. H., Butterworth Farm, Foster, Ohio (1890).
Foster, Solomon, 264 Clinton Ave., Newark, N. J. (1910).
Foster, William E., Providence Public Library, Providence, R. I. (1905).
Fowler, Rufus B., 3 Tuckerman St., Worcester, Mass. (1909).
Fox, Charles K., Haverhill, Mass. (1909).
Fox, Hugh F., 109 E. 15th St., New York City (1910).
Fradenburgh, Adelbert Grant, Adelphi College, Brooklyn, N. Y. (1894).

Franklin, Fabian, c/o *New York Evening Post,* New York City (1892).

Fraser, Alexander Hugh Ross, Boardman Hall, Ithaca, N. Y. (1895).

Fraser, Wilber J., Urbana, Ill. (1910).

Freehoff, J. C., 557 W. 124th St., New York City (1900).

Freeman, Harrison B., Jr., 50 State St., Hartford, Conn. (1901).

Freer, Hamline H., Mt. Vernon, Iowa. (1893).

French, Herbert F., 166 Essex St., Boston, Mass. (1909).

Frenning, John E., 42 Union St., Boston, Mass. (1909).

Freund, John C., 760 W. End Ave., New York City (1909).

Friedenwald, Herbert, 356 Second Ave., New York City (1891).

Friedman, H. G., c/o Public Service Commission, Tribune Bldg., New York City (1908).

*Fuller, Paul, 68 William St., New York City (1887).

Furber, Henry Jewett, Jr., 701 New York Life Bldg., Chicago, Ill. (1892).

†Galesburg Public Library, Galesburg, Ill.

Galliver, George A., 819 Devon St., Arlington, N. J. (1909).

Galloway, Lee, New York University School of Commerce, Washington Square, E., New York City (1909).

Gannaway, John W., Grinnell, Iowa (1909).

Gannett, Henry, U. S. Geological Survey, Washington, D. C. (1895).

Garcia, Rafael A., Clarines, Venezuela, S. A. (1909).

Gardiner, Robert H., Gardiner, Me. (1909).

Gardner, Henry Brayton, 54 Stimson Ave., Providence, R. I. (1886).

Garfield, Harry A., Williams College, Williamstown, Mass. (1898).

Garrard, Jephthah, 405 Johnston Bldg., Cincinnati, Ohio (1890).

Garrett, Robert, 506 Continental Trust Bldg., Baltimore, Md. (1904).

Garrison, Elisha Ely, 55 Hillhouse Ave., New Haven, Conn. (1909).

Garrison, George Pierce, Austin, Texas (1888).

Garst, Julius, Worcester, Mass. (1909).

Gates, Stanley, 189 LaSalle St., Chicago, Ill. (1910).

Gault, Franklin Benjamin, Vermilion, S. D. (1894).

Gavin, Frank E., 902 Majestic St., Indianapolis, Ind. (1902).

Gay, Edwin Francis, 58 Highland St., Cambridge, Mass. (1904).

George, William Henry, Beaver Falls, Pa. (1909).

†Georgia, University of, Athens, Ga.

Gephart, William Franklin, Ohio State University, Columbus, Ohio (1906).

Gerling, Henry Joseph, Teachers' College, Park and Teresa Aves., St. Louis, Mo. (1896).
Gerstenberg, Charles W., 141 Broadway, New York City (1909).
*Gest, William Purves, Merion Station, Pa. (1905).
Gettemy, Charles F., Bureau of Statistics of Labor, Boston, Mass. (1909).
Ghent, W. J., 260 W. 54th St., New York City (1904).
Gibson, William J., 32 Liberty St., New York City (1910).
Giddings, Franklin Henry, 150 W. 79th St., New York City (1886).
‡Gide, Charles, c/o Faculté de droit, Place de Panthéon, Paris, France (1892).
Giesecke, Albert Anthony, Apartado 283, Lima, Peru, S. A. (1907).
Gifford, W. S., 125 Milk St., Boston, Mass. (1909).
Gilbert, James H., 387 E. 11th St., Eugene, Ore. (1909).
Gillett, Arthur D. S., 1703 Hughitt Ave., Superior, Wis. (1906).
Gillin, John Lewis, Iowa State University, Iowa City, Iowa (1909).
Gilman, Fred H., Winterport, Me. (1910).
Gilson, N. S., Madison, Wis. (1900).
Gladden, Washington, Columbus, Ohio (1886).
Glasson, William Henry, Durham, N. C. (1902).
Glenn, John Mark, 152 E. 35th St., New York City (1894).
Glenn, *Mrs.* John M., 152 E. 35th St., New York City (1909).
Glicksman, Nathan, 485 Terrace Ave., Milwaukee, Wis. (1901).
Glocker, T. Wesley, 9 Hamilton Pl., Boston, Mass. (1908).
Gochenour, E. T., Moorefield, W. Va. (1909).
Godkin, Lawrence, 36 W. 10th St., New York City (1910).
†Gonzales, D. Camilo, Sr., Director General de los Telégrafos Federales, Mexico, D. F., Mexico.
Goodell, Edwin Burpee, Montclair, N. J. (1894).
Goodhue, Everett Walton, Colgate University, Hamilton, N. Y. (1905).
Goodman, David, 247 W. 130th St., New York City (1909).
Goodnow, Frank Johnson, Columbia University, New York City (1887).
†Goodwyn Institute, Memphis, Tenn.
Gould, Elgin Ralston Lovell, 281 Fourth Ave., New York City (1886).
Gove, William Henry, 254 Lafayette St., Salem, Mass. (1891).
Grætz, Victor, I Bartenkeingasse 2, Vienna, Austria (1902).
Grant, Henry Tyler, P. O. Box 1432, Providence, R. I. (1909).
Gras, Norman S. B., 56 Columbia St., Cambridge, Mass. (1909).
Gray, Edward, 19 Stratford Pl., Newark, N. J. (1909).

Gray, John Chipman, 60 State St., Boston, Mass. (1890).
Gray, John Henry, University of Minnesota, Minneapolis, Minn. (1888).
Gray, R. S., 1921 Telegraph Ave., Oakland, Calif. (1909).
Greeley, Harold Dudley, 2 Rector St., New York City (1909).
Green, Charles R., Library Massachusetts Agricultural College, Amherst, Mass. (1909).
*Green, David I., Hartford, Conn. (1890).
Greendlinger, Leo, 32 Waverly Pl., New York City (1909).
Greenwood, Burt W., 193 May St., Worcester, Mass. (1909).
*Grey, Albert Henry George, Lesbury, Northumberland, Eng. (1896).
Gries, John M., Bureau of Corporations, Washington, D. C. (1910).
Griffin, Charles A., 3 West St., Utica, N. Y. (1909).
Grinfeld, Isaac, Livingston Hall, Columbia University, New York City (1909).
Groat, George Gorham, Ohio Wesleyan University, Delaware, Ohio (1904).
Groton, W. M. The Dean's House, Woodland Ave. and 50th St., Philadelphia, Pa. (1886).
*Gulick, John Thomas, E. Manoa Road, Honolulu, H. T. (1887).
Gunn, James Newton, 43 Wall St., New York City (1910).
Hadley, Arthur Twining, New Haven, Conn. (1888).
Hagerty, James Edward, Ohio State University, Columbus, Ohio (1902).
Hale, William H., 40 First Pl., Brooklyn, N. Y. (1910).
Hall, Edward K., 101 Milk St., Boston, Mass. (1909).
Hall, Fred S., Real Estate Trust Bldg., Philadelphia, Pa. (1909).
Halligan, Howard A., 463 West St., New York City (1910).
Hallowell, J. Mott, West Medford, Mass. (1909).
Halpern, Morris, 27 W. 112th St., New York City (1909).
Halsey, John Julius, Lake Forest, Ill. (1888).
Ham, Arthur Harold, 346 Fourth Ave., New York City (1910).
Hamill, Charles H., 134 Monroe St., Chicago, Ill. (1910).
Hamlin, Charles Sumner, 2 Raleigh St., Boston, Mass. (1900).
Hammargren, Ernest L., 3657-13th St., N. W., Washington, D. C. (1908).
Hammond, John Henry, 40 Wall St., New York City (1902).
Hammond, Matthew Brown, 1483 Michigan Ave., Columbus, Ohio (1894).
Hancock, G. D., 21 Main St., Amherst, Mass. (1908).
Hand, Learned, U. S. Court House, New York City (1910).

Haney, Lewis Henry, 923 Greenwood Ave., Ann Arbor, Mich. (1906).
Hangen, Nils P., 752 E. Gorham St., Madison, Wis. (1910).
Hanger, G. Wallace W., U. S. Department of Labor, Washington, D. C. (1901).
Hankins, Frank Hamilton, Clark College, Worcester, Mass. (1907).
*Hanks, *Mrs.* C. Stedman, 53 State St., Boston, Mass. (1888).
Hanna, Hugh Henry, 1522 N. Penna. St., Indianapolis, Ind. (1904).
*Harding, W. E., Bethany, N. Y. (1890).
Hare, Frank E., 1133 Rockland St., Logan, Philadelphia, Pa. (1909).
Harned, Franklin M., 17 Shepherd Ave., Brooklyn, N. Y. (1908).
Harriman, C. H., 42 Church St., New Haven, Conn. (1909).
Hart, Charles H., 25 Broad St., New York City (1909).
Hart, William O., 134 Carondelet St., New Orleans, La. (1907).
Hartshorn, Lewis E., Hanover, N. H. (1910).
†Harvard University Library, Department of Social Ethics, Emerson Hall, Cambridge, Mass.
†Harvard University Library, Gore Hall, Cambridge, Mass.
Hastings, William Granger, Wilbur, Saline Co., Nebr. (1904).
Hatch, Leonard Williams, 140 S. Allen St., Albany, N. Y. (1901).
Hatfield, Henry Rand, University of California, Berkeley, Calif. (1898).
*Hathaway, Frank Randel, R. F. D. No. 2, Hudson, N. Y. (1888).
Hatton, William H., New London, Wis. (1902).
Havens, William W., 469 East 134th St., New York City (1910).
Hawley, Frederick Barnard, 82 Wall St., New York City (1888).
Hayes, John Robert, North Hall, University of Wisconsin, Madison, Wis. (1910).
Haynes, Fred E., Morningside College, Sioux City, Iowa (1908).
Haynes, George, 509 W. 50th St., New York City (1909).
Hazard, Frederick Rowland, P. O. Box 2, Syracuse, N. Y. (1902).
Hazard, Rowland Gibson, Peacedale, R. I. (1901).
†Hazen, Lucius R., 198 Main St., Middletown, Conn.
Hazzard, William, 310 Orange St., Peoria, Ill. (1910).
Hebberd, R. W., 26 Gramercy Park, New York City (1904).
†Hebrew Shelter Guardian Society, 150th St. and Broadway, New York City.
Hedrick, Wilbur Olin, East Lansing, Mich. (1910).
†Helena Public Library, Helena, Mont.
Hemmens, Henry J., 54 Wall St., New York City (1909).
Hemmeon, Joseph Clarence, McGill University, Montreal, Canada (1910).

Henderson, Charles Richmond, 5736 Washington Ave., Hyde Park Station, Chicago, Ill. (1895).
Henderson, Harry Bloom, Cheyenne, Wyo. (1901).
Hendricks, George B., Logan, Utah (1910).
Herczeg, Imre de Josika, 28 W. 10th St., New York City (1910).
Herrick, Cheesman Abiah, Girard College, Philadelphia, Pa. (1901).
Herriott, Frank I., Des Moines, Iowa (1896).
Herzog, Paul M., 41 W. 68th St., New York City (1909).
Hess, R. H., University of Minnesota, Minneapolis, Minn. (1908).
Hewes, Amy, Mt. Holyoke College, South Hadley, Mass. (1906).
Heyke, John Ericson, 152 Temple St., New Haven, Conn. (1909).
Hibbard, B. H., Iowa State College, Ames, Iowa (1908).
Hickisch, Charles G., 1375 Broadway, Denver, Colo. (1909).
Hicks, Frederick Charles, University of Cincinnati, Cincinnati, Ohio (1887).
Hiester, A. V., 320 Race Ave., Lancaster, Pa. (1900).
Higgs, Joseph, Lafayette, Ind. (1910)
Hildebrand, Edward, 2158 Seventh Ave., New York City (1909).
Hill, Donald MacKay, 35 Congress St., Boston, Mass. (1909).
Hill, Fred B., Northfield, Minn. (1910).
Hill, Joseph Adna, Census Office, Washington, D. C. (1887).
Hill, Robert Tudor, 124 E. 28th St., New York City (1909).
Hill, Wm., University of Chicago, Chicago, Ill. (1908).
Hill, William H., 50 Congress St., Boston, Mass. (1909).
Hillhouse, James, Sachem's Wood, New Haven, Conn. (1909).
Hills, Arthur Stedman, 2 Rector St., New York City (1910).
Hines, Walker D., 52 William St., New York City (1903).
Hirsch, Dr. Karl, 52 Westendstrasse, Frankfort a. M., Germany (1906).
Hitchcock, Frank Harris, Metropolitan Club, Washington, D. C. (1902).
Hoag, Clarence Gilbert, Haverford, Pa. (1910).
Hoagland, H. E., Prairie City, Ill. (1910).
Hobart, R. B., 24 Marlborough St., Boston, Mass. (1909).
Hobson, John Atkinson, Elmstead, Limpsfield, Surrey, Eng. (1890).
Hodson, George E., 100 Bristol St., New Haven, Conn. (1909).
Hoffman, Frederick L., Prudential Insurance Co., Newark, N. J. (1906).
Holcomb, Alfred E., 26 Cortlandt St., New York City (1910).
Holcomb, George N., Amherst, Mass. (1909).
Holcombe, Arthur Norman, Perkins' Hall, Cambridge, Mass. (1909).

Holdsworth, John Thom, University of Pittsburg, Pittsburg, Pa. (1903).
Holland, Arthur, 62 Main St., Concord, Mass. (1904).
Hollander, Jacob H., Johns Hopkins University, Baltimore, Md. (1890).
Holmes, George K., Department of Agriculture, Washington, D. C. (1887).
Holt, Erastus Eugene, 723 Congress St., Portland, Me. (1910).
Holt, Henry, 34 W. 33d St., New York City (1899).
*Hopkins, Geo. B., 25 W. 48th St., New York City (1909).
Hopper, Carola N., 11 E. 45th St., New York City (1909).
Hornblower, Henry, 60 Congress St., Boston, Mass. (1909).
Horne, Perley L., Kamehameha Schools, Honolulu, H. T. (1901).
Hotchkiss, Willard Eugene, Evanston, Ill. (1902).
Hourwich, Isaac A., 919 Massachusetts Ave., N. E., Washington, D. C. (1901).
Houston, David F., Washington University, St. Louis, Mo. (1896).
*Houston, Samuel Frederick, Chestnut Hill, Philadelphia, Pa. (1888).
Howard, Earl Dean, Northwestern University, Evanston, Ill. (1905).
Howe, Samuel T., 1925 West St., Topeka, Kan. (1894).
Howes, Frank H., 248 Park St., Newton, Mass. (1909).
Hoyt, Allen G., 407 Central Park West, New York City (1910).
Hoxie, Robert F., 6649 Woodlawn Ave., Chicago, Ill. (1900).
Hubbard, Ross W., 504 N. 5th St., Marshalltown, Iowa (1909).
Hubbard, William Pallister, 1421 Chapline St., Wheeling, W. Va. (1901).
Hughes, Charles Evans, Executive Mansion, Albany, N. Y. (1904).
Hull, Charles Henry, Ithaca, N. Y. (1892).
Hun, Marcus T., 25 N. Pearl St., Albany, N. Y. (1909).
Hunt, Rockwell D., University of Southern California, Los Angeles, Calif. (1908).
Hunt, William C., Census Office, Washington, D. C. (1898).
Hunter, Arthur, 346 Broadway, New York City (1904).
Huntington, Charles C., Ohio State University, Columbus, Ohio (1905).
Huntington, Francis C., 54 William St., New York City (1904).
†Hurd, George E., Glasgow, Mont.
Hurd, Richard M., 47 Liberty St., New York City. (1897).
Hurley, W., 1922 Rose St., Regina, Sask., Canada (1909).
Huse, Charles Phillips, 54 Thayer Hall, Cambridge, Mass. (1908).
Hutchins, F. Lincoln, Box 52, Capitol Sta., Albany, N. Y. (1908).

Hutchinson, Emilie Josephine, Mount Holyoke College, South Hadley, Mass. (1909).
Hutchinson, Lincoln, Faculty Club, Berkeley, Calif. (1904).
Hutchinson, Winfield S., 125 Milk St., Boston, Mass. (1909).
Hutzler, David, 1801 Eutaw Pl., Baltimore, Md. (1910).
Hyman, Louise, 49 W. 56th St., New York City (1909).
†Idaho, University of, Moscow, Idaho.
*Iles, George, Public Library, Ottawa, Ontario, Canada (1888).
†Illinois, University of, Champaign, Ill.
†Indiana State Library, Indianapolis, Ind.
†Indiana University Library, Bloomington, Ind.
†Indianapolis Public Library, Indianapolis, Ind.
Insull, Samuel, 139 Adams St., Chicago, Ill. (1900).
†Iowa State College Library, Ames, Iowa.
†Iowa State Library, Des Moines, Iowa.
†Iowa State Teachers' College, Cedar Falls, Iowa.
†Iowa State University Library, Iowa City, Iowa.
*Irwin, Dudley M., 71 Board of Trade, Buffalo, N. Y. (1890).
Jackman, William T., 99 Buell St., Burlington, Vt. (1910).
Jackson, Dugald C., Massachusettes Institute of Technology, Boston, Mass. (1909).
Jacobson, Maurice, 1335 F St., Washington, D. C. (1894).
Jacobsson, Gustave, 1450 Reed Pl., Chicago, Ill. (1909).
Jacobstein, Meyer, State University of North Dakota, Grand Forks, N. D. (1909).
*James, Edmund Janes, University of Illinois, Urbana, Ill. (1886).
Janes, George M., Woburn R. F. D., Burlington, Mass. (1909).
*Jayne, Henry LaBarre, 503 Chestnut St., Philadelphia, Pa. (1887).
Jeffrey, Joseph Andrew, 581 E. Town St., Columbus, Ohio (1901).
Jenks, Jeremiah Whipple, 2 South Ave., Ithaca, N. Y. (1886).
Jennison, A. C., 3 Ware Hall, Cambridge, Mass. (1909).
Jensen, Jens, 1141 N. Sacramento Ave., Chicago, Ill. (1910).
†Jersey City Free Library, Jersey City, N. J.
Jester, Simeon VanTrump, 185 Dean St., Brooklyn, N. Y. (1910).
Johannsen, N., Rosebank, N. Y. (1905).
†John Crerar Library, Chicago, Ill.
†Johns Hopkins University Library, Baltimore, Md.
Johnson, Alvin Saunders, University of Chicago, Chicago, Ill. (1901).
Johnson, Bolling Arthur, 218 E. 49th St., New York City (1909).
Johnson, Edgar H., 6005 Woodlawn Ave., Chicago, Ill. (1910).
Johnson, Eleanor Hope, 37 Madison Ave., New York City (1910).
Johnson, Emory Richard, University of Pennsylvania, Philadelphia, Pa. (1893).

Johnson, Franklin Lee, c/o Mercantile National Bank, St. Louis, Mo. (1909).
Johnson, Joseph French, Washington Square, E., New York City (1896).
Johnson, William C., 149 Broadway, New York City (1907).
Johnson, William Eugene, Laurel, Md. (1904).
Joline, Adrian Hoffman, 54 Wall St., New York City (1909).
Jones, Breckenridge, 45 Portland Pl., St. Louis, Mo. (1909).
Jones, Edward D., 625 Oxford Road, Ann Arbor, Mich. (1900).
Jones, Eliot, 60 Perkins' Hall, Cambridge, Mass. (1909).
Jones, Everett S., The Allen School, West Newton, Mass. (1909).
Jones, Howel, Topeka, Kan. (1910).
Judson, Frederick Newton, 500-506 Rialto Bldg., St. Louis, Mo. (1900).
†Kansas City Public Library, Kansas City, Mo.
†Kansas State Library, Topeka, Kan.
†Kansas State Normal School, Emporia, Kan.
†Kansas, University of, Library, Lawrence, Kan.
Keith, Horace A., 1090 Main St., Brockton, Mass. (1909).
Keith, John Meigs, San José, Costa Rica, Central America. (1896).
Kellogg, Paul U., 105 E. 22d St., New York City (1909).
Kelly, John F., 284 W. Housatonic St., Pittsfield, Mass. (1887).
Kelsey, Carl, Logan Hall, University of Pennsylvania, Philadelphia, Pa. (1909).
*Kelsey, Francis Willey, 826 Tappan St., Ann Arbor, Mich. (1887).
Kemmerer, Edwin W., Goldwin Smith Hall, Ithaca, N. Y. (1903).
Kemmerer, R. C., 84 Broadway, Brooklyn, N. Y. (1909).
Kengott, George Frederick, 296 Liberty St., Lowell, Mass. (1910).
Kennan, Kossuth Kent, 935 Cambridge Ave., Milwaukee, Wis. (1900).
Kennedy, Frank Lowell, 43 Appleton St., Cambridge, Mass. (1909).
Kennedy, James B., Union College, Schenectady, N. Y. (1906).
Kennedy, Philip B., 4 Ware Hall, Cambridge, Mass. (1909).
Kent, William, 12 Sherman St., Chicago, Ill. (1901).
Keppler, Theodore L., American Sugar Refining Co., Granite St., Boston, Mass. (1909).
Keveney, Charles, 50 Congress St., Boston, Mass. (1909).
*Keynes, John Neville, 6 Harvey Road, Cambridge, Eng. (1888).
Keyser, Robert Brent, 5 Hopkins Pl., Baltimore, Md. (1903).
Kidder, Camillus G., 27 William St., New York City (1887).
Kilbourne, James, 604 E. Town St., Columbus, Ohio (1904).
Kilburn, Florence M., 27 Halsey St., Brooklyn, N. Y. (1910).
Kimball, David P., P. O. Box 2133, Boston, Mass. (1909).

Kime, Virgil M., 410 Chemical Bldg., St. Louis, Mo. (1908).
King, Stanley, 354 Congress St., Boston, Mass. (1909).
Kingsbury, Susan M., 110 Hancock St., Cambridge, Mass. (1910).
Kingwill, J. H., 1634 Broadway, Denver, Colo. (1909).
Kinley, David, Champaign, Ill. (1890).
*Kinosita, Yetaro, 38 Minamicho, Takanawa, Shiba-Ku, Tokyo, Japan (1904).
Kinsman, Delos O., State Normal School, Whitewater, Wis. (1900).
Kirk, William, Brown University, Providence, R. I. (1903).
Kirstein, Louis E., 315 Washington St., Boston, Mass. (1909).
Kleene, Gustav A., Trinity College, Hartford, Conn. (1898).
Klein, Jacob, 902 Rialto Bldg., St. Louis, Mo. (1887).
Klein, Joseph J., 24 W. 113th St., New York City (1909).
Knapp, Martin Augustine, Interstate Commerce Commission, Washington, D. C. (1901).
Knopf, Alfred A., Lawrence, L. I., N. Y. (1910).
Kohler, Max J., 30 Broad St., New York City (1902).
Koizumi, S., c/o Koizumi & Co., Nade near Kobe, Japan (1908).
Koren, John, 25 Pemberton Square, Boston, Mass. (1910).
Kotany, Ludwig, 307 N. 4th St., St. Louis, Mo. (1909).
Krause, Holger E., The Prudential Insurance Co., Newark, N. J. (1910).
Kuczynski, Robert K., Schoensberg, Berlin, 47 Sponholzstrasse, Germany (1900).
Kursheedt, Manuel Augustus, 302 Broadway, New York City (1890).
Kutscher, F. E., Syms School, 49 E. 61st St., New York City (1909).
Kutzleb, Walter, 840 West End Ave., New York City (1909).
Lagerquist, Walter E., 325 Dryden Road, Ithaca, N. Y. (1910).
Lahee, J. S., Burlington, Iowa (1910).
Latimer, T. E., 506 E. Springfield Ave., Champaign, Ill. (1910).
Lattimer, Gardner, 391 W. Spring St., Columbus, Ohio (1909).
Lauck, W. Jett, 61 Maltby Bldg., Washington, D. C. (1909).
Laughlin, J. Laurence, 5747 Lexington Ave., Hyde Park Station, Chicago, Ill. (1904).
Lauman, George Nieman, Cornell University, Ithaca, N. Y. (1910).
Lauterbach, Edward, 22 William St., New York City (1900).
Lavery, James F., 184 Eldridge St., New York City (1909).
Lawrence, Arthur W., 348 Congress St., Boston, Mass. (1909).
†Lawrence College, Appleton, Wis.
Lawrence, Samuel C., 8 Rural Ave., Medford, Mass. (1909).
Lawson, Victor F., 123 Fifth Ave., Chicago, Ill. (1910).
Leach, Frank A., 541 Hobart St., Oakland, Calif. (1910).

Lee, Ivy Ledbetter, c/o Harris, Winthrop & Co., 25 Pine St., New York City (1904).
*Leeson, J. R., P. O. Box 2221, Boston, Mass. (1890).
†Leland Stanford Jr. University Library, Palo Alto, Calif.
Leman, J. Howard, 35 Congress St., Boston, Mass. (1909).
Leonard, Frederick M., 4243 Walnut St., Philadelphia, Pa. (1910).
LeRossignol, James Edward, University of Denver, University Park, Colo. (1896).
‡Leroy-Beaulieu, Paul, Collège de France, Paris, France (1887).
‡Levasseur, Pierre-Émile, 26 Rue Monsieur-le-Prince, Paris, France (1892).
Levine, Louis, Columbia University, School of Pol. Sci., New York City (1909).
Lévy, Raphäel Georges, 3 Rue de Noisiel XVIe, Paris, France (1893).
Lewinski, Edward H., Columbia University, New York City (1909).
Lewis, Burdette G., Public Service Commission, New York City (1906).
Libby, Charles F., 57 Exchange St., Portland, Me. (1909).
Lincoln, Jonathan Thayer, Box 516, Fall River, Mass. (1909).
Lindley, Harlow, Earlham College, Richmond, Ind. (1910).
Lindsay, Samuel McCune, 105 E. 22d St., New York City (1894).
Lipman, F. L., c/o Wells Fargo Nevada National Bank, San Francisco, Calif. (1894).
Lippincott, Harold E., Hall of Records, New York City (1898).
Litman, Simon, University of Illinois, Champaign, Ill. (1909).
Lloyd, Godfrey I. H., University of Toronto, Toronto, Canada (1910).
Lockhart, Oliver Cary, Ohio State University, Columbus, Ohio (1904).
Loeb, Benjamin W., Hotel Flanders, 135 W. 47th St., New York City (1910).
Loeb, Isidor, Columbia, Mo. (1892).
†Loescher & Co., 307 Corso Umberto 1, Rome, Italy.
Loewy, Benno, 206 Broadway, New York City (1890).
Logan, James, 222 Salisbury St., Worcester, Mass. (1900).
Long, Thurman B., 42 S. Tyron St., Charlotte, N. C. (1909).
Longley, Edmund W., 125 Milk St., Boston, Mass. (1910).
Looney, William Henry, Union Mutual Bldg., Portland, Me. (1893).
Loos, Isaac Althaus, Iowa City, Iowa (1890).
Lorenz, Max Otto, Census Bureau, Washington, D. C. (1905).
Loring, Augustus P., 40 State St., Boston, Mass. (1909).
†Los Angeles Public Library, Los Angeles, Calif.

*Louchheim, Samuel K., West End Trust Bldg., Cor. Broad St. and S. Penn Square, Philadelphia, Pa. (1896).
Lough, W. H., Jr., 32 Waverly Place, New York City (1908).
†Louisville Free Public Library, Louisville, Ky.
Lovejoy, Owen R., 105 E. 22d St., New York City (1910).
Lovett, James L., 151 Congress St., Portland, Me. (1909).
*Low, Seth, 30 E. 64th St., New York City (1887).
Lowden, Frank O., Oregon, Ill. (1901).
Lowenthal, Esther, Brooks Hall, Columbia University, New York City (1909).
Lownhaupt, Frederick, Ossining, N. Y. (1909).
Lowrie, John Marshall, Hartley Hall, Columbia University, New York City (1909).
Lowry, John C., 126 S. 19th St., Philadelphia, Pa. (1889).
Lowry, Robert J., Lowry National Bank, Atlanta, Ga. (1909).
Ludlam, Charles S., 30 Broad St., New York City (1904).
Lum, Charles M., Prudential Bldg., Newark, N. J. (1910).
Lummis, William, 320 W. 107th St., New York City (1909).
Lurton, Freeman Ellsworth, Anoka, Minn. (1908).
Lutz, Harley L., 213 W. Lorain St., Oberlin, Ohio (1910).
Lybrand, William M., 362 Riverside Drive, New York City (1910).
Lyman, Arthur Theodore, P. O. Box 1717, Boston, Mass. (1888).
Lyman, Herbert, 26 Marlborough St., Boston, Mass. (1909).
Lynn, John R., 925 Chestnut St., Philadelphia, Pa. (1909).
Lyon, Harry Richard, Lincoln House Association, 80 Emerald St., Boston, Mass. (1909).
McCabe, David Aloysius, Princeton, N. J. (1909).
MacColl, *Miss* C. I., Christodora House, 147 Ave. B., New York City (1910).
McConnell, Francis J., Greencastle, Ind. (1909).
McCormick, Alexander A., Nashota, Wis. (1900).
McCormick, Harold F., 215 Dearborn St., Chicago, Ill. (1901).
McCormick, Samuel B., 703 Home Trust Bldg., Pittsburg, Pa. (1906).
McCrea, Roswell Cheney, Roselle, N. J. (1899).
McCutcheon, Geo., University of South Carolina, Columbia, S. C. (1910).
*MacDuffie, John, 182 Central St., Springfield, Mass. (1893).
McElwain, J. Franklin, 63 Mt. Vernon St., Boston, Mass. (1909).
†McEnerney, Garret W., 1277 Flood Bldg., San Francisco, Calif.
MacFarlane, Charles William, 52d and Market Sts., Philadelphia, Pa. (1894).
Macfarlane, John J., Philadelphia Museum, 34 Vintage Ave., Philadelphia, Pa. (1888).

MacGill, Caroline Elizabeth, Box 1336, Pittsfield, Mass. (1908).
McGovern, William P., Cedarburg, Wis. (1909).
Macgregor, David H., The University, Leeds, Eng. (1906).
McKenzie, Fayette A., Ohio State University, Columbus, Ohio (1908).
McKibben, James A., 42 Mellen St., Dorchester Centre P. O., Boston, Mass. (1909).
McKinney, Walter D., Board of Trade Bldg., Columbus, Ohio (1909).
McLean, Francis Herbert, Box 152, South Jacksonville, Fla. (1898).
MacLean, James Alexander, Moscow, Idaho (1894).
McLean, Simon James, R. R. Commission, Ottawa, Can. (1900).
McLoughlin, William G., 558 Jersey Ave., Jersey City, N. J. (1909).
McMynn, Robert N., 498 Terrace Ave., Milwaukee, Wis. (1910).
Macomber, A. E., Nicholas Bldg., Toledo, Ohio (1886).
McPherson, Logan Grant, Staten Island Club, New Brighton, S. I., N. Y. (1899).
MacVeagh, Franklin, The Treasury Department, Washington, D. C. (1900).
*MacVeagh, Wayne, Brookfield Farm, Bryn Mawr, Pa. (1887).
McVey, Frank LeRond, University of North Dakota, N. D. (1895).
Macy, V. Everit, 68 Broad St., New York City (1899).
Maddock, William Herbert, 214 Monroe St., Chicago, Ill. (1910).
Magrane, P. H., 477 Washington St., Boston, Mass. (1909).
Magruder, J. W., 2528 N. Calvert St., Baltimore, Md. (1910).
Mahin, John Lee, 125 Monroe St., Chicago, Ill. (1910).
Main, Frank Wilbur, Farmers' Bank Bldg., Pittsburg, Pa. (1910).
†Maine, University of, Library, Orono, Me.
†Malden Public Library, Malden, Mass.
Maltbie, Milo Roy, 593 Riverside Drive, New York City (1898).
Manahan, Edward W., 155 Tremont St., Boston, Mass. (1910).
Manavati, M. B., c/o Thos. Cook & Son, Philadelphia, Pa. (1910).
Mangold, George Benjamin, 4002 Lexington Ave., St. Louis, Mo. (1910).
Manly, Basil Maxwell, 6028 Stony Island Ave., Chicago, Ill. (1910).
*Marburg, Theodore, 14 W. Mt. Vernon Place, Baltimore, Md. (1890).
Marks, Marcus M., 687 Broadway, New York City (1904).
Marks, Martin A., 1886 E. 93d St., Cleveland, Ohio (1901).
Marot, Mary Louise, 513 W. First St., Dayton, Ohio (1909).

‡Marshall, Alfred, Cambridge, Eng. (1887).
Marshall, Andrew, 38 Rockview St., Jamaica Plain, Mass. (1909).
Marshall, Leon Carroll, University of Chicago, Chicago, Ill. (1904).
Martin, John, Grymes Hill, S. I., N. Y. (1904).
Martin, R. W., 25 Nassau St., New York City (1905).
Martin, Selden Osgood, Bureau of Corporations, Washington, D. C. (1904).
Martin, William McChesney, Mississippi Valley Trust Co., St. Louis, Mo. (1910).
Marvin, Cornelia, Oregon Library Commission, State House, Salem, Oregon (1908).
Mason, Augustus Lynch, 1006 N. Delaware St., Indianapolis, Ind. (1904).
Mason, Frank R., 2822 W. Adams St., Chicago, Ill. (1910).
†Massachusetts Institute of Technology, Boston, Mass.
†Massachusetts State Library, State House, Boston, Mass.
Mathews, Byron C., City High School, Newark, N. J. (1898).
Mavor, James, University of Toronto, Toronto, Ontario, Can. (1910).
May, Arthur F., 2000 Ontario St., Cleveland, Ohio (1908).
May, George O., 52-54 William St., New York City (1908).
Mayer, Levy, c/o Moran, Kraus & Mayer, Chicago, Ill. (1900).
Maynard, Archibald B., Hawarden, Iowa (1904).
Mead, F. S., 55 Kilby St., Boston, Mass. (1909).
Mead, George H., 6016 Jackson Park Ave., Chicago, Ill. (1910).
†Mechanics' Mercantile Library, 31 Tost St., San Francisco, Calif.
Meck, Alexandre de, Oboukhoff 6, Moscow, Russia (1896).
†Medford Public Library, Medford, Mass.
Meeker, Royal, Princeton, N. J. (1903).
Méheley, Coloman, Fö utca 11, Budapest, Hungary II (1909).
†Mercantile Library, Astor Place, New York City.
†Mercantile Library, Broadway and Locust St., St. Louis, Mo.
Merchant, Ely Othman, 503 W. 122d St., New York City (1910).
Merriam, A. R., 314 Collins St., Hartford, Conn. (1893).
Merrifield, Webster, Pasadena, Calif. (1895).
Merriman, James D., 141 Broadway, New York City (1894).
Merritt, Walter Gordon, 27 William St., New York City (1910).
Messenger, Willard Reed, 50 W. 69th St., New York City (1909).
Metcalf, Henry Clayton, Tufts College, Mass. (1900).
Meyer, Balthasar Henry, University of Wisconsin, Madison, Wis. (1899).
Meyer, Eugene, Jr., 7 Wall St., New York City (1909).
Michael, Charles W., Perryman, Harford Co., Md. (1902).

†Michigan Agricultural College Library, Agricultural P. O., Ingham Co., Mich.
†Michigan State Library, Lansing, Mich.
†Michigan, University of, Library, Ann Arbor, Mich.
Middleton, Joseph Henry, State Department of Labor, Albany, N. Y. (1904).
Mikami, Yoshinaga, c/o Mitsui & Co., Kure, Japan (1901).
Mikkelsen, Michael Andrew, 610 S. Fifth Ave., Mt. Vernon, N. Y. (1900).
Miller, Adolph Caspar, Berkeley, Calif. (1901).
Miller, Edmund Thornton, University Station, Austin, Texas (1909).
Miller, George P., 102 Wisconsin St., Milwaukee, Wis. (1907).
Miller, H. A., Olivet, Mich. (1910).
Miller, J. E., 1849 C St., Lincoln, Nebr. (1904).
Miller, Wallace Elden, 225 Orchard Ave., Lebanon, Ohio (1904).
Miller, William Wilson, Wyoming Apartments, Seventh Ave. & 55th St., New York City (1904).
Millican, Alfred Clay, Station F., Seattle, Wash. (1908).
Million, John W., Mexico, Mo. (1901).
Millis, Harry Alvin, Palo Alto, Calif. (1895).
Mills, Herbert Elmer, Poughkeepsie, N. Y. (1890).
†Milwaukee Public Library, Milwaukee, Wis.
†Minneapolis Public Library, Minneapolis, Minn.
†Minnesota Tax Commission, State Capitol, St. Paul, Minn.
†Minnesota, University of, Minneapolis, Minn.
†Misch & Thron, 126 Rue Royale, Brusselles, Belgium.
†Missouri, University of, Library, Columbia, Mo.
Mitchell, James Ennis, Alma, Mich. (1900).
Mitchell, Wesley Clair, 2250 Prospect St., Berkeley, Calif. (1903).
Mixter, Charles Whitney, 57 Buell St., Burlington, Vt. (1890).
Moffat, Adelene, 138 Newbury St., Boston, Mass. (1909).
Mohr, Louis, 349 W. Illinois St., Chicago, Ill. (1910).
Monier, Roy H., Carrollton, Mo. (1909).
Montague, David T., Tremont Bldg., Boston, Mass. (1909).
Moody, Arthur Blair, 1 W. 85th St., New York City (1909).
Moore, Frederick Wightman, Vanderbilt University, Nashville, Tenn. (1892).
Moore, Henry Ludwell, Columbia University, New York City (1896).
Moore, Robert, Laclede Bldg., St. Louis, Mo. (1894).
Moors, John F., 111 Devonshire St., Boston, Mass. (1909).
Morehouse, Samuel C., 42 Church St., New Haven, Conn. (1909).
Morgan, J. A., 105 Utica St., Ithaca, N. Y. (1909).

MORGENTHAU, M. L., 360 Washington St., New York City (1909).
MORMAN, JAMES B., Kensington, Md. (1906).
MORRIS, RAY, 83 Fulton St., New York City (1909).
MORRIS, WILFRED R., Peterborough, Ont., Can. (1909).
MORSE, ANSON ELY, Marietta College, Marietta, Ohio (1909).
MORSE, ARTHUR A., 1731 Park Ave., Minneapolis, Minn. (1910).
MORSE, FRANK L., Ithaca, N. Y. (1910).
MORSE, GODFREY, 53 State St., Boston, Mass. (1909).
MORSS, JOHN WELLS, 60 State St., Boston, Mass. (1909).
MORTLAND, INEZ, Louisiana State University Library, Baton Rouge, La. (1909).
MORTON, D. WALTER, 1117 S. 3d St., Champaign, Ill. (1909).
MOSELEY, EDWARD AUGUSTUS, 1113 16th St., N. W., Washington, D. C. (1900).
MOTT, HOWARD S., 100 Broadway, New York City (1908).
MOURASSÉ, HAROUO, 24 Harukimatchi Santchome, Hongo, Tokyo, Japan (1901).
MOYNAHAN, GEORGE S., 170 Summer St., Boston, Mass. (1904).
MUERMAN, JOHN CHARLES, Pullman, Wash. (1910).
MUHLEMAN, MAURICE LOUIS, 15 William St., New York City (1892).
MUHSE, ALBERT CHARLES, Bureau of Corporations, Washington, D. C. (1903).
MUIRHEAD, JAMES F., 10 Channing Place, Cambridge, Mass. (1909).
MULLANEY, BERNARD J., City Hall, Chicago, Ill. (1910).
MULLEN, ALBERT OSWALD, 330 E. Lafayette Ave., Baltimore, Md. (1909).
MUMFORD, HERBERT W., Urbana, Ill. (1909).
MUNROE, JAMES PHINNEY, 77-79 Summer St., Boston, Mass. (1887).
MURDOCK, LOUISE HAMILTON, 136 Huntington Ave., Boston, Mass. (1910).
MURPHY, JOHN J., 42 Broadway, New York City (1909).
MURRAY, WALTER C., University of Saskatchewan, Saskatoon, Sask., Can. (1910).
MUSSEY, HENRY RAYMOND, Columbia University, New York City (1902).
NAGEL, CHARLES, Bureau of Commerce and Labor, Washington, D. C. (1901).
NAKAGAWA, S., Furukawa Mining Co., Tokyo, Japan (1907).
NEARING, SCOTT, University of Pennsylvania, Philadelphia, Pa. (1908).
†NEBRASKA STATE LIBRARY, Lincoln, Nebr.
†NEBRASKA, UNIVERSITY OF, LIBRARY, Lincoln, Nebr.
NEEB, CHARLES W., P. O. Box 127, Pittsburg, Pa. (1886).
NEEDHAM, CHARLES WILLIS, 1420 H St., Washington, D. C. (1902).

Neill, Charles P., Department of Labor, Washington, D. C. (1896).
†Newark Public Library, Newark, N. J.
†New Bedford Public Library, New Bedford, Mass.
†Newberry Library, Chicago, Ill.
Newcomb, Harry Turner, R. F. D. No. 1, Bethesda, Md. (1889).
†New Hampshire State Library, Concord, N. H.
†New York Public Library, 40 Lafayette Place, New York City.
†New York State College of Agriculture, Home Economics Department, Ithaca, N. Y.
†New York State Library, Albany, N. Y.
†New York University Library, University Heights, New York City.
†New York University School of Commerce, Accounts and Finance, Washington Square, E., New York City.
Norris, *Mrs.* Rollin, Glenn Lane, Ardmore, Pa. (1909).
†North Carolina, University of, Library, Chapel Hill, N. C.
†North Dakota Public Library Commission, Bismarck, N. D.
North, Franklin Mason, 121 W. 122d St., New York City (1909).
North, S. Newton Dexter, 35 West 32d St., New York City (1893).
†Northwestern State Normal School, Alva, Okla.
†Northwestern University Library, Evanston, Ill.
Norton, Fred Lewis, 434 Tremont Bldg., Boston, Mass. (1887).
Norton, J. Pease, 563 Orange St., New Haven, Conn. (1901).
Norton, Samuel Wilber, 1420 Ashland Block, Chicago, Ill. (1910).
Noyes, Alexander Dana, *Evening Post*, New York City (1899).
Oakes, S. Robert Mayer, 689 Yale Station, New Haven, Conn. (1910).
†Oberlin College Library, Oberlin, Ohio.
Ogg, Frederic Austin, 401 Broadway, Cambridge, Mass. (1910).
O'Hara, Frank, 1026 Newton St., Brookland, D. C. (1910).
†Ohio State Library, Columbus, Ohio.
†Ohio State University Library, Columbus, Ohio.
†Ohio Wesleyan University Library, Delaware, Ohio.
Ohnuki, Chuichi, c/o Mitsui & Co., 445 Broome St., New York City (1909).
†Oklahoma, University of, Norman, Okla.
†Okurasho-Rinji-Kokusai-Seirikyoku, Department of Finance, Tokyo, Japan.
Oldham, John E., 35 Congress St., Boston, Mass. (1909).
†Omaha Public Library, Omaha, Nebr.
†Ontario Legislative Library, Toronto, Ontario, Can.
†Oregon University Library, Eugene, Ore.
†Osaka City Higher Commercial School, Osaka, Japan.
Osborn, William C., 71 Broadway, New York City (1910).

Osborne, Thomas Mott, Auburn, N. Y. (1904).
Osgood, Roy Clifton, c/o First Trust and Savings Bank, First National Bank Bldg., Chicago, Ill. (1904).
†Oshima, K., Formosan Government, Formosa, Japan.
Otis, Stanley L., 45 Broadway, New York City (1909).
Ottman, Fred H., 7209 Kedron Ave. Pittsburg, Pa. (1910).
Ovington, Mary W., 246 Fulton St., Brooklyn, N. Y.
Owen, Thos. M., Alabama Department of Archives and History, Montgomery, Ala. (1908).
Page, Edward D., Oakland, N. J. (1888).
Page, Thomas Walker, University of Virginia, Charlottesville, Va. (1900).
Page, Walter H., 130 East 67th St., New York City (1910).
Paine, Robert Treat, 6 Joy St., Boston, Mass. (1886).
*Palgrave, Robert Harry Inglis, Henstead Hall, Wrentham, Suffolk, Eng. (1890).
Palmer, George Thomas, 614 Clark St., Evanston, Ill. (1909).
Park, George Arthur, 121 W. Ormsby Ave., Louisville, Ky. (1904).
Parker, Carl William, Glens Falls, N. Y. (1910).
Parmelee, Julius H., 1448 Rhode Island Ave., Washington, D. C. (1906).
Parmelee, Maurice, University of Kansas, Lawrence, Kan. (1909).
Parris, Marion, Bryn Mawr, Pa. (1906).
Parry, Carl Eugene, University of Michigan, Ann Arbor, Mich. (1909).
Patten, Frank Chauncy, Rosenberg Library, Galveston, Texas (1904).
Patten, Simon Nelson, University of Pennsylvania, Philadelphia, Pa. (1886).
Patterson, Gaylord H., Kimball College, Salem, Ore. (1909).
Patton, Eugene Bryan, University of Rochester, Rochester, N. Y. (1908).
Paxson, Charles, P. O. Box 146, Swarthmore, Pa. (1909).
*Peabody, George Foster, 2 Rector St., New York City (1902).
†Peabody Institute, Baltimore, Md.
Pearmain, Sumner Bass, 53 State St., Boston, Mass. (1902).
Pearson, George Edward, 325 Highland Ave., W. Somerville, Mass. (1910).
Peat, J. B., Fargo, N. D. (1909).
Peieff, Nicholas Elias, 1050 Yale Station, New Haven, Conn. (1909).
Peirce, Paul Skeels, State University, Iowa City, Iowa (1909).
Peixotto, Jessica B., Cloyne Court, Berkeley, Calif. (1909).
Pelletier, Victor M., 4 Howland St., Roxbury, Mass. (1909).
†Pennsylvania State College, State College, Pa.

†Pennsylvania State Library, Harrisburg, Pa.
†Pennsylvania State Library, Legislative Reference Bureau, Harrisburg, Pa.
†Pennsylvania, University of, Library, Philadelphia, Pa.
Perkins, Dexter, 176 Huntington Ave., Boston, Mass. (1910).
Perkins, Jacob Henry, 14 Victoria Square, Clifton, Bristol, Eng. (1901).
Perry, Alfred T., Marietta, Ohio (1910).
Person, Harlow Stafford, Hanover, N. H. (1901).
Persons, Charles Edward, 2141 Sherman Ave., Evanston, Ill. (1910).
Persons, Warren Milton, Hanover, N. H. (1905).
Peters, Edward T., P. O. Box 256, Washington, D. C. (1886).
Phelan, James J., 60 Congress St., Boston, Mass. (1909).
Phelan, Raymond V., University of Minnesota, Minneapolis, Minn. (1906).
Phelps, Edward Bunnell, 141 Broadway, New York City (1909).
Phelps, Roswell F., 127 Oakdale Ave., East Dedham, Mass. (1909).
†Philadelphia Library, Juniper and Locust Sts., Philadelphia, Pa.
Phillips, George M., The First National Bank, Northfield, Minn. (1909).
Phillips, Henry, 284 State St., Springfield, Mass. (1909).
Phillips, John Burton, Boulder, Colo. (1902).
*Phipps, Lawrence C., 1154 E. Colfax Ave., Denver, Colo. (1901).
Pierce, Caroline Frances, Wellesley College, Wellesley, Mass. (1900).
*Pigou, Arthur Cecil, King's College, Cambridge, Eng. (1908).
Pillsbury, Mary M., General Theological Library, 53 Mt. Vernon St., Boston, Mass. (1909).
Pinchot, Gifford, 1705 Rhode Island Ave., N. W., Washington, D. C. (1890).
†Plainfield Public Library, Plainfield, N. J.
Plehn, Carl Copping, Berkeley, Calif. (1891).
Pleydell, A. C., 29 Broadway, New York City (1909).
Plimpton, George Arthur, 70 Fifth Ave., New York City (1887).
†Poland, *Mr.*, c/o Sotheran & Co., 140 Strand, London, Eng.
Pollek, Francis D., 427 W. 144th St., New York City (1910).
Pope, Jesse Eliphalet, 910 Lawrence St., Washington, D. C. (1900).
Porter, William H., 56 E. 67th St., New York City (1894).
†Portsmouth Free Public Library, Portsmouth, Ohio.
Potter, William P., Swarthmore, Pa. (1910).
Powers, Le Grand, 3107 16th St., N. W., Washington, D. C. (1886).
Pratt, Edward Ewing, 105 E. 22d St., New York City (1909).

Pratt, George C., 463 West St., New York City (1909).
Pratt, Sereno S., 104 Cambridge Place, Brooklyn, N. Y. (1903).
Prendergast, William A., 31 Nassau St., New York City (1907).
Prescott, Arthur Taylor, 739 North St., Baton Rouge, La. (1900).
Preston, Harold, Pioneer Bldg., Seattle, Wash. (1901).
Price, William Hyde, 1631 Madison St., Madison, Wis. (1902).
Prince, Benjamin F., 644 Wittenberg Ave., Springfield, Ohio (1910).
Prince, Leon C., Carlisle, Pa. (1909).
†Princeton University, Economic Seminary, Princeton, N. J.
†Princeton University Library, Princeton, N. J.
Prouty, Charles Azro, Newport, Vt. (1902).
Pugh, Alexander L., 161 Madison Ave., Elizabeth, N. J. (1909).
Pugsley, Chester DeWitt, Peekskill, N. Y. (1910).
†Punjab University Library, Senate House, Lahore, India.
Purdy, Lawson, Hall of Records, New York City (1900).
Putnam, Bertha Haven, Mount Holyoke College, South Hadley, Mass. (1904).
Putnam, Harrington, 45 William St., New York City (1887).
Putnam, James William, Butler College, Indianapolis, Ind. (1905).
Quaintance, Hadley Winfield, Laramie, Wyo. (1901).
Quinn, John, 31 Nassau St., New York City (1910).
Rachie, Elias, Willmar, Minn. (1910).
†Radical Club, Scottdale, Pa.
Ramage, Burr James, Bureau of Corporations, Washington, D. C. (1900).
Ranck, Samuel H., Librarian Grand Rapids Public Library, Grand Rapids, Mich. (1906).
†Rand School of Social Science, 112 E. 19th St., New York City.
Randolph, E. F., 1654 Massachusetts Ave., Cambridge, Mass. (1890).
Raper, Charles Lee, Chapel Hill, N. C. (1902).
Rastall, Benjamin M., University of Wisconsin, Madison, Wis. (1909).
Rath, James A., Honolulu, H. T. (1910).
Rawles, William A., Bloomington, Ind. (1900).
Ray, Walter T., W. S. Pittsburg Storage and Supply Depot, Pittsburg, Pa. (1905).
Raymond, Freeborn F., 60 State St., Boston, Mass. (1909).
Rayner, Albert W., 1814 Eutaw Place, Baltimore, Md. (1898).
Read, Lyle D., 1549 Farwell Ave., Rogers Park, Chicago, Ill. (1910).
Rearick, A. C., 71 Broadway, New York City (1910).
Reynolds, Allen H., Walla Walla, Wash. (1894).

Reynolds, James Bronson, 151 Central Park, W., New York City (1910).
†Reynolds Library, Rochester, N. Y.
†Rhode Island State Library, Providence, R. I.
Rhodes, James Ford, 392 Beacon St., Boston, Mass. (1887).
Rich, Edgar J., 1002 Pemberton Bldg., Boston, Mass. (1909).
Rich, Joseph W., 427 North Dubuque St., Iowa City, Iowa (1902).
Richardson, Russell, 56 Hitchcock Hall, Chicago University, Chicago, Ill. (1910).
Richmond, Thomas C., Madison, Wis. (1900).
Ripley, William Zebina, Newton Centre, Mass. (1890).
Rives, George Lockhart, 69 E. 79th St., New York City (1899).
Roberts, George E., Commercial National Bank, Chicago, Ill. (1901).
Robins, Raymond, 1437 W. Ohio St., Chicago, Ill. (1910).
Robinson, Edward C., 25 Pine St., New York City (1910).
Robinson, E. V., University of Minnesota, Minneapolis, Minn. (1908).
Robinson, F. B., 3671 Broadway, New York City (1909).
*Robinson, *Mrs.* Jane Bancroft, 425 Cass Ave., Detroit, Mich. (1893).
Robinson, Louis N., Swarthmore, Pa. (1909).
Robinson, Maurice Henry, Urbana, Ill. (1899).
Robinson, Philip Alexander, 63 Inman St., Cambridge, Mass (1901).
Robinson, Samuel Adams, Crozet, Va. (1898).
†Rochester University Library, Rochester, N. Y.
Rogers, Charles B., 91 Genesee St., Utica, N. Y. (1893).
Rogers, Emma Winner (Mrs. Henry Wade), 413 Orange St., New Haven, Conn. (1890).
Rollins, Albert Moore, 129 W. Elm St., Brockton, Mass. (1909).
Root, Louis Carroll, 2108 Palmer Ave., New Orleans, La. (1894).
Rosenblatt, Frank F., 520 W. 123d St., New York City (1909).
Rosenblum, David, 13 Astor Place, New York City (1909).
Rosenfeld, Henry L., 120 Broadway, New York City (1910).
Rosenquest, Eugene, Westchester, New York City (1910).
Rosenthal, Lessing, Suite 1400, Ft. Dearborn Bldg., Chicago, Ill. (1891).
Rosenwald, Julius, c/o Sears, Roebuck & Co., Chicago, Ill. (1910).
Rosewater, Victor, *Omaha Bee,* Omaha, Nebr. (1892).
Ross, Adam A., Land Title Bldg., Philadelphia, Pa. (1909).
Ross, Edward Alsworth, Madison, Wis. (1892).
Rossiter, W. S., 1424 K St., N. W., Washington, D. C. (1906).
Rothbarth, Albert, 330 West End Ave., New York City (1909).
Rountree, Harrison H., Randolph, Mass. (1909).

Rowe, Ina B., 618 Sixteenth Ave., S. E., Minneapolis, Minn. (1909).
Rubinow, I. M., Bureau of Statistics, Washington, D. C. (1905).
Rudd, Channing, 15 Wall St., New York City (1904).
Russ, Ernest F., 70 High St., Boston, Mass. (1909).
Russell, Frederic Arthur, Albion, Mich. (1909).
Russell, William Hepburn, Rooms 401-402 Mutual Reserve Bldg., 309 Broadway, New York City (1896).
Rutter, Frank R., Department of Agriculture, Washington, D. C. (1896).
Ryan, John A., St. Paul Seminary, St. Paul, Minn. (1907).
Ryman, James H. T., Missoula, Mont. (1892).
Sachs, Ralph L., 28 W. 22d St., New York City (1909).
Sage, Dean, 49 Wall St., New York City (1909).
†Sage, Russell, Foundation, 105 E. 22d St., New York City.
†St. Louis Public Library, St. Louis, Mo.
†St..Paul Public Library, St. Paul, Minn.
Sakolski, A. M., 60 Broadway, New York City (1904).
Saliers, Earl A., Siam, Ohio (1909).
Sanborn, John Bell, Madison, Wis. (1896).
†San Francisco Free Public Library, Hayes and Franklin Sts., San Francisco, Calif.
†San Francisco News Co., 747 Howard St., San Francisco, Calif.
*Sanger, William Cary, Sangerfield, N. Y. (1890).
Sano, Zensaku, Higher Commercial College, Tokyo, Japan (1899).
Sargisson, Zaccheus E., Berwyn, Ill. (1909).
Sauter, William F., 1637 Diamond St., Philadelphia, Pa. (1888).
Schaffner, Joseph, 4819 Greenwood Ave., Chicago, Ill. (1909).
Schaffner, Margaret A., 228 Langdon St., Madison, Wis. (1905).
Schaper, William A., University of Minnesota, Minneapolis, Minn. (1901).
Schiff, Jacob H., 52 William St., New York City (1910).
Schmitt, Alfred C., First National Bank, Albany, Ore. (1905).
Schurman, Jacob Gould, Cornell University, Ithaca, N. Y. (1910).
Schwab, Gustav Henry, 5 Broadway, New York City (1890).
Schwab, John Christopher, 310 Prospect St., New Haven, Conn. (1888).
*Scott, Austin, New Brunswick, N. J. (1890).
Scott, Charles R., 60 Wall St., New York City (1908).
Scott, George Cranch, Framingham, Mass. (1904).
Scott, William Amasa, Madison, Wis. (1888).
Scovel, Sylvester Fithian, Wooster, Ohio (1892).
Scovell, C. H., 119 Grasmere St., Newton, Mass. (1909).
Scovil, Samuel, 711 Cuyahoga Bldg., Cleveland, Ohio (1900).
†Scranton Public Library, Scranton, Pa.

Scroggs, William Oscar, Louisiana State University, Baton Rouge, La. (1910).
*Scudder, Doremus, Honolulu, H. T. (1890).
Seabury, Wm. A., 32 Nassau St., New York City. (1910).
Seager, George W., St James, Minn. (1909).
Seager, Henry Rogers, Columbia University, New York City (1888).
Sears, Burton Peabody, 944 Kentucky St., Lawrence, Kan.
Sears, Horace Scudder, 49 Federal St., Boston, Mass. (1909).
Seaton, Fay N., 304 Senate Office Bldg., Washington, D. C. (1910).
†Seattle Public Library, Seattle, Wash.
Secrist, Horace, 51 North Hall, Madison, Wis. (1908).
Seeds, Edward Paxson, 204 Tenth St., N. E., Washington, D. C. (1909).
Seiler, C. Linn, University of Pennsylvania, Philadelphia, Pa. (1909).
*Seligman, Edwin Robert Anderson, 324 W. 86th St., New York City (1886).
*Seligman, Isaac Newton, 36 W. 54th St., New York City (1887).
Seligman, Jefferson, c/o J. & W. Seligman & Co., New York City (1910).
Serrill, Charles Lloyd, 210 Real Estate Trust Bldg., Philadelphia, Pa. (1909).
Severance, *Mrs.* Frank H., 150 Jewett Ave., Buffalo, N. Y. (1910).
Sewall, Hannah Robie, Forest Glen, Md. (1910).
Shattuck, Joseph, Jr., Springfield Institute for Savings, Springfield, Mass. (1909).
Shaw, Albert, New York City (1886).
Shaw, A. W., Winnetka, Ill. (1909).
Shaw, Winfield L., 20 Cochato Road, Braintree, Mass. (1909).
Sheets, Beatrice H., 501 W. 50th St., New York City (1909).
Shepherd, Fred Strong, Asbury Park, N. J. (1896).
Sheridan, Frank J., Bureau of Labor, Washington, D. C. (1910).
Shippen, Joseph, 627 N. Y. Block, Seattle, Wash. (1909).
Shirasu, C., c/o Viscount Kuki, Kobe, Japan (1899).
Shoemaker, Herbert Bradish, 50 Pine St., New York City (1910).
Shortt, Adam, Civil Service Commission, Ottawa, Can. (1898).
Simes, William, P. O. Box 3084, Boston, Mass. (1894).
Simkhovitch, Vladimir G., Columbia University Library, New York City (1901).
Simpkins, C. Webster, 1396 Dean St., Brooklyn, N. Y. (1910).
Skelton, O. D., Queen's University, Kingston, Can. (1909).
Sloane, J. Parker, 347 W. 87th St., New York City (1909).
Small, Albion Woodbury, 5731 Washington Ave., Chicago, Ill. (1888).

Smalley, Harrison Standish, 709 S. State St., Ann Arbor, Mich. (1902).
*Smart, William, Queen Margaret College, Glasgow, Scotland (1888).
†Smith College Library, Northampton, Mass.
Smith, Delavan, Lake Forest, Ill. (1901).
Smith, Ernest Ashton, Meadville, Pa. (1901).
Smith, Frederic A., Commerce Bldg., Kansas City, Mo. (1909).
*Smith, Jacob George, 405 Emerson Ave., Syracuse, N. Y. (1903).
Smith, James B., 141 Orange St., New Haven, Conn. (1909).
Smith, Milton W., P. O. Drawer 767, Portland, Ore. (1900).
Smith, Rufus D., 535 Fulton Bldg., Pittsburg, Pa. (1910).
Smith, Samuel George, 125 College Ave., St. Paul, Minn. (1894).
Smith, Thomas Guilford, 203A Ellicott Square, Buffalo, N. Y. (1887).
Smith, Ulysses H., Indiana University, Bloomington, Ind. (1909).
Snow, Marshall Solomon, Washington University, St. Louis, Mo. (1901).
Snow, William G., 24 Milk St., Boston, Mass. (1909).
†South Dakota Agricultural College Library, Brookings, S. D.
Souther, Charles Edward, 128 Broadway, New York City (1887).
†Southern California, University of, Los Angeles, Calif.
†Southwestern University Library, Georgetown, Texas.
Spencer, Charles Worthen, Princeton University, Princeton, N. J. (1894).
Spencer, John Oakley, Morgan College, Baltimore, Md. (1890).
Sprague, Oliver M. W., 18 Sumner Road, Cambridge, Mass. (1900).
*Sprague, Rufus F., Greenville, Mich. (1890).
Stangeland, Charles Emil, 5910 Erie St., Austin, Chicago, Ill. (1904).
Stanton, Edgar William, State Agricultural College, Ames, Iowa (1888).
Starke, Albert G., 32 Rose St., New York City (1910).
†State Manual Training Normal School, Pittsburg, Kan.
†State Normal School Library, Normal School, Ga.
†State Normal School, Stevens Point, Wis.
†Steiger & Co., Newspaper Box 298, New York City.
Steiner, Bernard C., Enoch Pratt Free Library, Baltimore, Md. (1910).
Stephens, Geo. Ware, Mount Pleasant, Iowa (1909).
Stephens, Henry Morse, Berkeley, Calif. (1901).
Sterns, Frederick H., Box 457, Benson, Nebr. (1910).
Sterns, Worthy Putnam, 3348 Mt. Pleasant St., Washington, D. C. (1901).
Sterrett, J. E., 54 William St., New York City (1909).

Stetson, Francis Lynde, 15 Broad St., New York City (1909).
Steuart, William M., The Kensington, Washington, D. C. (1898).
Stewart, Ethelbert, 3754 North 41st Court, Chicago, Ill. (1910).
Stewart, John Lammey, South Bethlehem, Pa. (1887).
Stickney, Clinton G., c/o Walworth Mfg. Co., South Boston, Mass. (1909).
Stockton, Frank Tenney, 2915 W. North Ave., Baltimore, Md. (1909).
Stockwell, Hubert G., 831 Land Title Bldg., Philadelphia, Pa. (1910).
Stokes, Anson Phelps, 100 William St., New York City (1894).
Stokes, Howard Kemble, 11 Pine St., New York City (1902).
Stone, Alfred Holt, Dunleith, Miss. (1900).
Stone, Galen L., 87 Milk St., Boston, Mass. (1909).
Stone, Nahum I., Bureau of Manufacturers, Washington, D. C. (1899).
Storrow, James J., 44 State St., Boston, Mass. (1909).
Stratton, Robert M., 70 W. 52d St., New York City (1904).
Straus, Isidor, Sixth Ave. and 34th St., New York City (1894).
Straus, Oscar Solomon, Elberon, N. J. (1886).
Street, Robert Gould, Galveston, Texas (1896).
Streightoff, Frank Hatch, 85 Macon St., Brooklyn, N. Y. (1910).
Stroock, Sol M., 30 Broad St., New York City (1909).
Suffern, Edward L., 165 Broadway, New York City (1909).
Sulzberger, Cyrus L., 516 West End Ave., New York City (1904).
Sumner, George S., Claremont, Calif. (1905).
Sumner, Helen L., 2852 Ontario Road, Washington, D. C. (1903).
Swain, Henry Huntington, Dillon, Mont. (1894).
†Swarthmore College Library, Swarthmore, Pa.
*Swayne, Wager, 170 Broadway, New York City (1887).
Swayze, Francis J., 765 High St., Newark, N. J. (1905).
Swenson, John Canute, Provo, Utah (1909).
Symmes, Frank Jameson, 322 Montgomery St., San Francisco, Calif. (1904).
†Syracuse Public Library, Syracuse, N. Y.
†Syracuse University Library, Syracuse, N. Y.
†Takemura, Kinji, c/o Y. Ikeda, 27 Masagocho, Hongo, Tokyo, Japan.
Takeuchi, Seiichi, 1035 Chapala St., Santa Barbara, Calif. (1910).
Takimota, Yoshio, Higher Commercial School, Tokyo, Japan (1907).
†Tanaka, M. I., Librarian Imperial Library, Tokyo, Japan.
Tao, Daqueen, 321 Dryden Road, Ithaca, N. Y. (1910).
Tappan, J. B. Coles, 49 Wall St., New York City (1909).
Tarbell, Ida M., 341 Fifth Ave., New York City (1903).

Taussig, Benjamin J., City Hall, St. Louis, Mo. (1909).
Taussig, Frank William, 2 Scott St., Cambridge, Mass. (1887).
Taussig, Rudolph Julius, 3134 16th St., San Francisco, Calif. (1904).
Taussig, William, 3447 Lafayette Ave., St. Louis, Mo. (1909).
Taylor, Archibald W., 5502 Greenwood Ave., Hyde Park Sta., Chicago, Ill. (1908).
Taylor, Fred Manville, 527 Church St., Ann Arbor, Mich. (1892).
Taylor, Graham, 953 Grand Ave., Chicago, Ill. (1890).
Taylor, Henry Charles, 222 Spooner St., Madison, Wis. (1903).
Taylor, Seneca N., 530 Pierce Bldg., St. Louis, Mo. (1909).
Taylor, William George Langworthy, Lincoln, Nebr. (1894).
Temple, Herbert M., Germania Life Bldg., St. Paul, Minn. (1909).
†Texas, University of, Library, Austin, Texas.
Thach, Charles Cullman, Auburn, Ala. (1904).
*Thom, DeCourcy Wright, 119 E. Baltimore St., Baltimore, Md. (1900).
Thomas, George, 217 East Fourth North St., Logan, Utah (1909).
Thompson, C. Bertrand, 3 Dana St., Cambridge, Mass. (1909).
Thompson, Carl William, State University, Vermilion, S. D. (1909).
Thompson, John G., 404 Oregon St., Urbana, Ill. (1908).
Thurber, Charles Herbert, 29 Beacon St., Boston, Mass. (1901).
Tigrett, Augustus K., Jackson, Tenn. (1909).
Timlin, W. H., 1600 Grand Ave., Milwaukee, Wis. (1894).
Tinsley, Richard Parran, 26 Broadway, New York City (1910).
Todd, Edwin S., Miami University, Oxford, Ohio (1908).
†Tohoku Imperial University Agricultural College, Sapporo, Hokkaido, Japan.
†Tokyo Bankers' Association, Sakamoto-cho Nihonbashi, Tokyo, Japan.
Tooke, Charles Wesley, 606 University Ave., Syracuse, N. Y. (1894).
†Toronto, University of, Library, Toronto, Canada.
Towles, John Ker, 1007 West Illinois St., Urbana, Ill. (1909).
Towne, Ezra Thayer, Northfield, Minn. (1905).
Towner, R. H., 100 Broadway, New York City (1904).
Trenholm, *Miss* M. deG., 540 East 76th St., New York City (1910).
Trumbower, Henry R., "Merwick," Princeton, N. J. (1905).
Tucker, George Fox, 616 Barristers' Hall, Boston, Mass. (1890).
Tucker, Henrietta Inez, 536 East 5th St., New York City (1910).
Tuckey, Edson Newton, 214 Comstock Ave., Syracuse, N. Y. (1901).
†Tufts College Library, Tufts College, Mass.
†Tulane University Library, New Orleans, La.

Turner, J. R., 105 Utica St., Ithaca, N. Y. (1909).
Turrel, Edgar Abel, 76 William St., New York City (1909).
Tuthill, Edward, 253 S. Lime St., Lexington, Ky. (1910).
Tuttle, Charles A., 606 W. Wabash Ave., Crawfordsville, Ind. (1887).
†Twietmeyer, A., Buchhandlung, Leipzig, Germany
Ullman, Isaac M., 621 Chapel St., New Haven, Conn. (1909).
Underhill, C. M., Librarian, Utica Public Library, Utica, N. Y. (1903).
Upham, Frederick William, American Trust Bldg., Chicago, Ill. (1901).
Urdahl, Thomas Klingerburg, Box 363, Lexington, Va. (1900).
†Ursinus College, Collegeville, Pa.
Vanderlip, Frank Arthur, 52 Wall St., New York City (1904).
VanKleeck, Mary, 39½ Washington Sq., New York City (1910).
Veditz, Charles William Augustus, George Washington University, Washington, D. C. (1902).
Veiller, Lawrence, 105 East 22d St., New York City (1910).
Venable, Richard Morton, 205 E. German St., Baltimore, Md (1887).
†Vermont State Library, Montpelier, Vt.
†Vermont, University of, Burlington, Vt.
Verrill, H. M., 72 Bowdoin St., Portland, Me. (1909).
Vickers, E. H., 2 Nichome, Mita Shiba, Tokyo, Japan (1902).
Vincent, George E., 5737 Lexington Ave., Chicago, Ill. (1901).
Vineberg, Solomon, State University of Iowa, Iowa City, Iowa (1909).
Vinton, Alexander H., Bishop's House, Springfield, Mass. (1909).
Virtue, G. O., University of Nebraska, Lincoln, Nebr. (1893).
Vogelstein, Theodore Max, Akademiestrasse 19, Munich, Germany (1907).
Vogt, Paul Leroy, Pullman, Wash. (1909).
†Wabash College Library, Crawfordsville, Ind.
Wade, Festus J., 4451 Lendell Ave., St. Louis, Mo. (1909).
Wade, Robert Buchanan, 11 Wall St., New York City (1909).
Wadlin, Horace G., 118 Woburn St., Reading, Mass. (1893).
*Wadsworth, Harrison L., Denver, Colo. (1887).
‡Wagner, Adolph, University of Berlin, Berlin, Germany (1887).
Waite, Albert Goodnow, 16 Cedar St., Worcester, Mass. (1909).
Walden, *Mrs.* Percy Talbot, 210 St. Ronan St., New Haven, Conn. (1901).
Walker, Francis, Bureau of Corporations, Washington, D. C. (1895).
Walker, Guy Morrison, 15 Wall St., New York City (1910).

Walker, Thomas Barlow, 807 Hennepin Ave., Minneapolis, Minn. (1901).
Walker, William G., New Rochelle, N. Y. (1909).
Wallace, A. B., 392 Main St., Springfield, Mass. (1909).
Wallace, Janet Monroe, 2420 Harney St., Omaha, Nebr. (1909).
Waller, Elmer B., Maryville College, Maryville, Tenn. (1905).
Walling, William English, 21 West 38th St., New York City (1901).
Wallis, Robert N., Fitchburg, Mass. (1910).
*Walsh, Correa Moylan, Bellport, L. I., N. Y. (1901).
Wang, Ching-Chun, University Sta., Urbana, Ill. (1909).
Warburg, P. M., 27 Pine St., New York City (1901).
Ward, Lester Frank, Brown University, Providence, R. I. (1887).
Warren, Bentley W., 60 State St., Boston, Mass. (1908).
Warren, William R., 81 Fulton St., New York City (1887).
†Waseda University Library, Tokyo, Japan.
Washburne, Wm. W., 120 Collingwood Ave., Detroit, Mich. (1909).
†Washington State College Library, Pullman, Wash.
†Washington State Library, Olympia, Wash.
†Washington University Library, St. Louis, Mo.
†Washington, University of, Seattle, Wash.
Wassam, Clarence W., State University of Iowa, Iowa City, Iowa (1909).
Waterman, Edgar Francis, 88 Collins St., Hartford, Conn. (1904).
Watkins, George P., Public Service Commission, Tribune Bldg., New York City (1901).
Watson, Frank D., University of Pennsylvania, Philadelphia, Pa. (1908).
Watson, William A., 187 Marlborough Road, Brooklyn, N. Y. (1904).
Weatherley, Ulysses Grant, Indiana University, Bloomington, Ind. (1901).
Weaver, James Riley, DePauw University, Greencastle, Ind. (1890).
Webber, W. O., Defiance College, Defiance, Ohio (1909).
Weber, Adna Ferrin, 464 Elm Ave., Richmond Hill, L. I., N. Y. (1896).
Weber, Gustavus A., 510 South 7th St., Philadelphia, Pa. (1893).
Weed, Alonzo R., 113 Devonshire St., Boston, Mass. (1909).
Weeks, Rufus Wells, 346 Broadway, New York City (1895).
Weld, Louis D. H., 5123 Kingsessing Ave., Philadelphia, Pa. (1909).
Welles, Francis Raymond, 92 Ave. Henri Martin, Paris, France (1888).

Wellman, Hiller C., The City Library Association, Springfield, Mass. (1908).
†Wells College Library, Aurora, N. Y.
Wells, David Collin, Hanover, N. H. (1888).
Wells, Emelie Louise, Vassar College,, Poughkeepsie, N. Y. (1909).
Wells, Joseph H., 1 Court House Place, Springfield, Mass. (1909).
West, R. M., 159 Meigs St., Rochester, N. Y. (1910).
†West Virginia University Library, Morgantown, W. Va.
West, William L., 52 W. 3d St., St. Paul, Minn. (1901).
Westenhaver, D. C., 929 Garfield Bldg., Cleveland, Ohio (1901).
Weston, Charles, Hay Springs, Nebr. (1902).
Weston, Nathan Austin, University of Illinois, Champaign, Ill. (1894).
Weston, Stephen F., Yellow Springs, Ohio (1894).
Weston, Thomas, Jr., 410 Sears Bldg., Boston, Mass. (1909).
*Wetmore, George Peabody, Newport, R. I. (1890).
Weyl, Walter E., 29 West 11th St., New York City (1898).
Whealler, E. O., Box 1, Alto, Ga. (1910).
Wheeler, Edward W., 30 Boylston St., Cambridge, Mass. (1909).
Wheeler, Guy Francis, 765 Main St., Worcester, Mass. (1909).
Wheeler, William R., 1204 Merchants Exchange, San Francisco, Calif. (1909).
Wherry, Wm. M., Sr., 43 Cedar St., New York City (1910).
Whitaker, Albert Conser, Stanford University, Calif. (1902).
White, Alice R., Brooklyn, Conn. (1910).
White, Andrew Dickson, Ithaca, N. Y. (1887).
White, Edward L., 60 State St., Boston, Mass. (1909).
White, Gaylord S., 237 East 104th St., New York City (1909).
White, Grant A., University Press, Cambridge, Mass. ((1909).
White, Horace, 18 W. 69th St., New York City (1892).
*White, Julian Leroy, 51 News Bldg., Baltimore, Md. (1887).
Whitington, Calvin Kelsey, 925 Chestnut St., Philadelphia, Pa. (1909).
Whitten, Robert H., Public Service Commission, 154 Nassau St., New York City (1900).
Whittlesey, Walter Lincoln, 23 N. Edwards Hall, Princeton, N. J. (1906).
Whyte, A. F., National Liberal Club, Whitehall Pl., S. W., London, Eng. (1909).
Wicker, George Ray, 30 N. Main St., Hanover, N. H. (1900).
Wilcox, Delos Franklin, 123 Fifth St., Elmhurst, N. Y. (1898).
Wildman, Murray Shipley, 847 Judson Ave., Evanston, Ill. (1907).
Wilgus, James Alva, Platteville, Wis. (1901).

Wilkie, Edward A., 101 Milk St., Boston, Mass. (1909).
Willcox, Walter Francis, Ithaca, N. Y. (1892).
Willett, Allan H., Carnegie Institute, Pittsburg, Pa. (1902).
†Williams College Library, Williamstown, Mass.
Williams, Francis M., 54 Mutual Life Bldg., Jacksonville, Fla. (1909).
Williams, G. C. F., 990 Prospect Ave., Hartford, Conn. (1902).
Williams, Henry Smith, 36 East 23d St., New York City (1910).
Williams, James M., Hobart College, Geneva, N. Y. (1909).
*Williams, Timothy Shaler, Lloyds Manor, Huntington, L. I., N. Y. (1901).
Williams, W. H., 32 Nassau St., New York City (1910).
Williamson, Charles C., Bryn Mawr, Pa. (1904).
Willis, Henry Parker, 206 Corcoran Bldg., Washington, D. C. (1898).
Williston, Samuel, Harvard Law School, Cambridge, Mass. (1909).
Willoughby, William Franklin, 1725 Lamont St., Washington, D. C. (1888).
Wilson, Hugh M., cor. Church and Walnut Sts., Richmond Hill, L. I., N. Y. (1910).
Wilson, Paul C., 80 Washington Sq., E., New York City (1910).
Wilson, Woodrow, Princeton, N. J. (1886).
Windle, Charles T., Bureau of Corporations, Washington, D. C. (1910).
Wing, David Laforest, Bureau of Corporations, Washington, D. C. (1904).
*Winslow, William Copley, 525 Beacon St., Boston, Mass. (1890).
Winston, Ambrose Paré, Washington University, St. Louis, Mo. (1901).
Winterbotham, J. M., Madison, Wis. (1909).
†Wisconsin Free Public Library Commission, Madison, Wis.
†Wofford College Library, Spartanburg, S. C.
Wolfe, Albert Benedict, Oberlin College, Oberlin, Ohio (1905).
Wood, Frederick A., 295 Pawtucket St., Lowell, Mass. (1894).
Wood, Stuart, 400 Chestnut St., Philadelphia, Pa. (1886).
Wood, Wm. M., P. O. Box 381, Boston, Mass. (1909).
*Woodford, Arthur Burnham, 469 Whalley Ave., New Haven, Conn. (1887).
Woodruff, Clinton Rogers, 703 North American Bldg., Philadelphia, Pa. (1888).
Woods, Frank F., c/o S. A. Woods Machine Co., Boston, Mass. (1909).
Woods, Robert Archey, 20 Union Park, Boston, Mass. (1904).
Woodward, P. Henry, 742 Asylum Ave., Hartford, Conn. (1902).

Woodward, S. W., Woodward & Lothrop Co., Washington, D. C. (1909).
†Worcester Free Public Library, Worcester, Mass.
*Worthington, T. K., *The Daily News,* Baltimore, Md. (1886).
Wright, Charles R., Fergus Falls, Minn. (1909).
Wright, Chester Whitney, University of Chicago, Chicago, Ill. (1904).
Wright, Herbert C., 44 Pine St., New York City (1906).
Wulsin, Lucien, 142 W. 4th St., Cincinnati, Ohio (1904).
Wyckoff, Garrett P., Grinnell, Iowa (1905).
†Wyoming University Library, Laramie, Wyo.
†Yang, Ching-su, Shang-Wu-Kwang, Pao, Board of Agriculture, Industry, and Commerce, Peking, China.
Yarros, Victor S., Hull House, 335 Halsted St., Chicago, Ill. (1901).
Young, Allyn A., Stanford University, Calif. (1900).
Young, Frederick George, Eugene, Ore. (1888).
Young, Jeremiah S., 1205 7th St., S. E., Minneapolis, Minn. (1909).
Young, Victor, 213 South Peoria St., Chicago, Ill. (1910).
Youngman, Anna Prichett, The Ridgeway, Wellesley, Mass. (1909).

## *THE TWENTY-SECOND ANNUAL MEETING.*

The Twenty-second Annual Meeting of the American Economic Association was held at New York City on December 27-31, 1909. This was celebrated as the twenty-fifth anniversary of the founding of the Association. The American Historical Association, the American Statistical Association, the American Sociological Society, the American Association for Labor Legislation, the American Social Science Association, the Bibliographical Society of America, and the American Society of Church History met at the same time and place. The American Economic Association held two joint sessions, one with the American Historical Association, on Tuesday morning, December 28, and one with the American Political Science Association, on Thursday morning, December 30.

The following names were entered on the register as attending the meetings of the American Economic Association, and there were others in attendance who failed to register:

Abratani, Jiro, New York City.
Adriance, W. M., Princeton, N. J.
Aldrich, Morton A., New Orleans, La.
Alexander, M. W., Lynn, Mass.
Ames, C. H., Newton, Mass.
Anderson, Francis F., Merriam Park, Minn.
Ambler, Charles H., Ashland, Va.
Andrews, George Frederick, Boston, Mass.
Arbuthnot, C. C., Cleveland, Ohio.
Arner, B. G. L., Hanover, N. H.

Avery, Elroy M., Cleveland, Ohio.
Bailie, William, Boston, Mass.
Baker, Charles Whiting, Montclair, N. J.
Baker, M. N., New York City.
Baldwin, A. C., Boston Mass.
Baldwin, Simeon E., New Haven, Conn.
Barnard, J. Lynn, Lansdowne, Pa.
Barnett, George E., Baltimore, Md.
Barrett, Don C., Haverford, Pa.
Beal, Thomas A., Ephraim, Utah.
Beman, Lamar T., Cleveland, Ohio.
Beer, William, New Orleans, La.
Beer, George Louis, New York City.
Belcher, Miss, Milwaukee, Wis.
Bemis, Edward W., Cleveland, Ohio.
Berglund, Abraham, Washington, D. C.
Best, Harry, New York City.
Bishop, A. L., New Haven, Conn.
Black, J. William, Waterville, Maine.
Blackmar, Frank W., Lawrence, Kan.
Bourne, Augustus O., Jr., New York City.
Bowker, R. R., New York City.
Bowman, D. Arthur, St. Louis, Mo.
Boyden, Arthur C., Bridgewater, Mass.
Boynton, Arthur J., Lawrence, Kan.
Brackett, Jeffrey R., Boston, Mass.
Brandt, Lilian, New York City.
Breckenridge, R. M., Bronxville, N. Y.
Brinsmade, John C., Washington, Conn.
Brisco, Norris A., New York City.
Brownson, Howard G., Philadelphia, Pa.
Bruce, H. Addington, Cambridge, Mass.
Butler, Elizabeth B., New York City.
Byrnes, Clara, New York City.
Capen, Edward Warren, Boston, Mass.

Carlton, Frank T., Albion, Mich.
Carstens, C. C., Boston, Mass.
Carver, T. N., Cambridge, Mass.
Catlin, Warren B., Ithaca, N. Y.
Chaddock, Robert E., Philadelphia, Pa.
Chase, Harvey Stuart, Boston, Mass.
Childs, Richard S., New York City.
Chirurg, Dr. Michael, Boston, Mass.
Chirurg, Isidore, Brooklyn, N. Y.
Chown, G., Kingston, Ont.
Claghorn, Kate Holladay, Brooklyn, N. Y.
Clark, David Taggart, Williamstown, Mass.
Clark, John Bates, New York City.
Clark, John Maurice, Colorado Springs, Colo.
Clark, Walter E., New York City.
Coker, Francis W., Princeton, N. J.
Copeland, Melvin T., Cambridge, Mass.
Coulson, R. E., Princeton, N. J.
Crook, J. W., Amherst, Mass.
Cruikshank, Alfred B., New York City.
Crum, Frederick S., Newark, N. J.
Culbertson, William S., New Haven, Conn.
Cutler, James Elbert, Cleveland, Ohio.
Daniels, Winthrop More, Princeton, N. J.
Davis, Andrew, Cambridge, Mass.
Davis, Edward H., West Lafayette, Ind.
Day, Clive, New Haven, Conn.
Devine, Edward T., New Rochelle, N. Y.
Dewey, Davis R., Boston, Mass.
Dewsnup, Ernest R., Champaign, Ill.
Dimmick, William W., New York City.
Dixon, Frank H., Hanover, N. H.
Doten, Carroll W., Cambridge, Mass.
DuBois, W. E. B., Atlanta, Ga.
Duncan, John C., Urbana, Ill.

Durand, E. Dana, Washington, D. C.
Edwards, Alba M., Washington, D. C.
Egleston, Melville, Elizabeth, N. J.
Ellwood, Charles A., Columbia, Mo.
Ely, Richard T., Madison, Wis.
Ewing, John Gillespie, San Juan, P. R.
Earp, Edwin L., Madison, N. J.
Fairchild, Fred R., New Haven, Conn.
Fairchild, Henry P., Brunswick, Maine.
Farnum, Henry W., New Haven, Conn.
Farquhar, Henry, Washington, D. C.
Fay, Sidney B., Hanover, N. H.
Felter, William L., Brooklyn, N. Y.
Ferber, J. Bernard, Boston, Mass.
Ferguson, Henry, Concord, N. H.
Fetter, Frank Albert, Ithaca, N. Y.
Field, James A., Chicago, Ill.
Fisher, Willard C., Middletown, Conn.
Fillebrown, C. B., Boston, Mass.
Fisher, Irving, New Haven, Conn.
Fitch, John A., Albany, N. Y.
Fletcher, B. L., Bangor, Maine.
Flocken, Ira G., Ithaca, N. Y.
Foerster, Robert F., Cambridge, Mass.
Foley, Daniel, Boston, Mass.
Foote, Allen R., Columbus, Ohio.
Ford, Worthington C., Boston, Mass.
Forrest, J. D., Indianapolis, Ind.
Fradenburgh, A. G., Brooklyn, N. Y.
Friedenwald, Herbert, New York City.
Friedman, H. G., Washington, D. C.
Galliver, George A., Arlington, N. J.
Galloway, Lee, New York City.
Garcia, R. A., Barcelona, Venezuela.
Gardner, Henry B., Providence, R. I.

Garrison, George P., Austin, Texas.
Gephart, W. F., Columbus, Ohio.
Gillin, John Lewis, Iowa City, Iowa.
Gerstenberg, Charles W., New York City.
Gettemy, Charles F., Boston, Mass.
Ghent, W. J., New York City.
Giddings, Franklin H., New York City.
Glocker, T. W., Boston, Mass.
Gogin, Eleanor Gertrude, New York City.
Goodman, David, New York City.
Goodnow, Frank J., New York City.
Gorham, George Groat, Delaware, Ohio.
Gould, E. R. L., New York City.
Gras, Norman B., Cambridge, Mass.
Gray, John H., Minneapolis, Minn.
Greeley, Harold D., New York City.
Green, David I., Hartford, Conn.
Greendlinger, Leo, New York City.
Grinfeld, Isaac, Buenos Aires, S. A.
Hagerty, J. E., Columbus, Ohio.
Hale, William H., Brooklyn, N. Y.
Halpern, Morris, New York City.
Hammond, Matthew B., Columbus, Ohio.
Hancock, G. D., Amherst, Mass.
Hart, Charles H., New York City.
Hart, Hastings H., White Plains, N. Y.
Hatch, Leonard W., Albany, N. Y.
Hawley, Frederick B., New York City.
Haynes, George E., New York City.
Henderson, Charles Richmond, Chicago, Ill.
Herrick, Cheesman A., Philadelphia, Pa.
Hill, Fred B., Northfield, Minn.
Hill, Robert T., New York City.
Hoffman, Frederick L., Newark, N. J.
Holcombe, A. N., Cambridge, Mass.

Holdsworth, John T., Pittsburg, Pa.
Hollander, Jacob H., Baltimore, Md.
Hotchkiss, W. E., Chicago, Ill.
Hourwich, Isaac A., Washington, D. C.
Howe, Frederick C., Madison, Wis.
Howard, Earl Dean, Evanston, Ill.
Haney, L. H., Ann Arbor, Mich.
Huanchang, Chen, Canton, China.
Hull, Charles H., Ithaca, N. Y.
Huntington, Charles C., Columbus, Ohio.
Huse, Charles Phillips, Cambridge, Mass.
Hutchinson, Emilie Josephine, Brooklyn, N. Y.
Hutchins, F. Lincoln, Albany, N. Y.
Hyman, Louise, New York City.
Iles, George, New York City.
James, Edmund J., Urbana, Ill.
Jennison, Albert C., Cambridge, Mass.
Jenks, Jeremiah, Ithaca, N. Y.
Jones, Eliot, Cambridge, Mass.
Johnson, William C., Flushing, L. I.
Judson, F. N., St. Louis, Mo.
Hall, E. K., Boston, Mass.
Kelsey, Carl, Philadelphia, Pa.
Kemmerer, Edwin Walter, Ithaca, N. Y.
Kemmerer, R. C., Brooklyn, N. Y.
Kennedy, J. W., Newark, N. J.
Kennedy, Philip B., Cambridge, Mass.
Kennan, K. K., Milwaukee, Wis.
Keppler, T. L., Boston, Mass.
Kidder, Camillus G., Orange, N. J.
Kinley, David, Urbana, Ill.
Kinsman, D. O., Whitewater, Wis.
Kingsbury, Susan M., Cambridge, Mass.
Kleene, G. A., Hartford, Conn.
Klein, Joseph J., New York City.

Kohler, Max J., New York City.
Koren, John, Boston, Mass.
Kirk, William, Providence, R. I.
Kursheedt, Manuel A., New York City.
Kutscher, F. E., East Orange, N. J.
Lear, J. M., Farmville, Va.
Levine, Louis, Brooklyn, N. Y.
Lewinski, E. H., New York City.
Lewis, Burdette G., New York City.
Lloyd, Godfrey I. H., Toronto, Ont.
Lockhart, O. C., Columbus, Ohio.
Lorenz, M. O., Washington, D. C.
Lough, William H., Jr., New York City.
MacFarlane, John, Philadelphia, Pa.
McCrea, Roswell C., Roselle, N. J.
McLoughlin, W. G., Jersey City, N. J.
Maltbie, Milo R., New York City.
Martin, John, Stapleton, S. I., N. Y.
Martin, Selden Osgood, Washington, D. C.
Marshall, L. C., Chicago, Ill.
Mavor, James, Toronto, Ont.
Meeker, Royal, Princeton, N. J.
Messenger, Willard Reed, New York City.
Middleton, Joseph Henry, Albany, N. Y.
Mills, Herbert E., Poughkeepsie, N. Y.
Mixter, Charles W., Burlington, Vt.
Moffat, Miss Adelene, Boston, Mass.
Moore, Frederick W., Nashville, Tenn.
Morgan, J. A., Ithaca, N. Y.
Muhlman, Maurice L., Mt. Vernon, N. Y.
Nearing, Scott, Philadelphia, Pa.
Neeb, C. W., Pittsburg, Pa.
Ohnuki, Chuichi, New York City.
Otis, Stanley L., New York City.
Parmelee, Maurice, Lawrence, Kan.

Parris, Marion, Bryn Mawr, Pa.
Patten, Simeon Nelson, Philadelphia, Pa.
Persons, Charles Edward, Princeton, N. J.
Perkins, Dexter, Boston, Mass.
Phelan, Raymond V., Minneapolis, Minn.
Phelps, Edward B., Jersey City, N. J.
Phelps, Roswell F., Dedham, Mass.
Pleydell, A. C., North Plainfield, N. J.
Plimpton, E. W., New York City.
Pratt, Edward Ewing, New York City.
Pratt, George C., Montclair, N. J.
Pugh, Alexander L., Elizabeth, N. J.
Putnam, Bertha Haven, New York City.
Rastall, B. L., Madison, Wis.
Rawles, William A., Bloomington, Ind.
Rhodes, James Ford, Boston, Mass.
Ripley, William Z., Cambridge, Mass.
Robertson, Jan V., Eastville, Va.
Robinson, Frederick B., New York City.
Robinson, E. V., Minneapolis, Minn.
Robinson, Louis N., Swarthmore, Pa.
Rosenblatt, Frank F., New York City.
Rosewater, Victor, Omaha, Neb.
Ross, Edward A., Madison, Wis.
Rogers, Emma Winner, New Haven, Conn.
Rubinow, I. M., Washington, D. C.
Rudd, Channing, New York City.
Rutter, Frank R., Washington, D. C.
Saliers, Earl, Columbus, Ohio.
Schaeffer, Virgil, Cambridge, Mass.
Severance, Mrs. Frank H., Buffalo, N. Y.
Sheets, Beatrice, New York City.
Simkhovitch, V., New York City.
Small, Albion W., Chicago, Ill.
Smalley, Harrison Standish, Ann Arbor Mich.

Smith, Ernest Ashton, Meadville, Pa.
Spencer, Charles Worthen, Princeton, N. J.
Stangeland, Charles E., Washington, D. C.
Steiner, Bernard C., Baltimore, Md.
Stone, N. I., Washington, D. C.
Straus, Percy S., New York City.
Stroock, Sol M., New York City.
Tao, Daqueen, Columbus, Ohio.
Taussig, F. W., Cambridge, Mass.
Thompson, C. Bertrand, Cambridge, Mass.
Tildsley, John L., Yonkers, N. Y.
Todd, Edwin S., Oxford, Ohio.
Towles, John K., Urbana, Ill.
Tuckey, Edwin Newton, Syracuse, N. Y.
Towner, R. H., Plainfield, N. J.
Urdahl, F. L., Lexington, Va.
Walker, Francis, Washington, D. C.
Ward, Lester F., Providence, R. I.
Watkins, George P., Brooklyn, N. Y.
Watson, Frank D., Philadelphia, Pa.
Watts, Jenny C., Cambridge, Mass.
Weatherly, U. G., Bloomington, Ind.
Weber, A. F., Richmond Hill, L. I.
Weyl, Walter E., New York City.
White, Horace, New York City.
Whitten, Robert H., Brooklyn, N. Y.
Whittlesey, W. L., Princeton, N. J.
Wicker, George Ray, Hanover, N. H.
Wildman, M. S., Evanston, Ill.
Wilcox, Delos F., Elmhurst, N. Y.
Willcox, Walter F., Ithaca, N. Y.
Willett, Allan H., Pittsburg, Pa.
Williams, G. C. F., Hartford, Conn.
Willoughby, W. F., Washington, D. C.
Willoughby, W. W., Baltimore, Md.

Williams, S. C., Johnson City, Tenn.
Williamson, Charles C., Bryn Mawr, Pa.
Wood, Frederick A., Lowell, Mass.
Woodburn, James A., Bloomington, Ind.
Woodruff, Clinton Rogers, Philadelphia, Pa.
Wright, Chester W., Chicago, Ill.
Young, Jeremiah, Minneapolis, Minn.

## PROGRAM.

*MONDAY, December 27.*

8 P.M. Carnegie Hall, 7th Ave. and 57th St.
Citizens' Meeting and Official Welcome to the Association.
Chairman, Joseph H. Choate.
Addresses by Governor Charles Evans Hughes, Mayor George B. McClellan, Dr. Nicholas Murray Butler.

*TUESDAY, December 28.*

10 A.M. Horace Mann Auditorium, Columbia University.
Joint Session with the American Historical Association.
Presidential Addresses:
(1) Imagination in History. President Albert Bushnell Hart, American Historical Association.
(2) Observation in Economics. President Davis R. Dewey, American Economic Association.

12.30 P.M. Luncheon in University Hall, Columbia University, tendered by the University.

3.30 P.M. Meeting of the Executive Committee.

4.30 P.M. Earl Hall, Columbia University.
Reception to the officers, members, and guests, given by the Academy of Political Science in the City of New York.

6.30 P.M. Club dinner for members and guests in the University Commons.

8 P.M. Earl Hall, Columbia University.
Anniversary Meeting.
(1) Historical Account of the Founding of the Association. Richard T. Ely, University of Wisconsin.
(2) The Work of the American Economic Association. Addresses by Arthur T. Hadley, Yale Univer-

sity; J. Laurence Laughlin, University of Chicago; James Bonar, Deputy Master of the Canadian Branch of the Royal Mint; and Edmund J. James, University of Illinois.

(3) Business Meeting. Reading of Reports. Appointment of Committees.

10 P.M. City Club of New York, 35 West 44th Street. Smoker.

*WEDNESDAY, December 29.*

9.30 A.M. Hotel Waldorf-Astoria.

General Topic: Economic Theory.

(1) Dynamic Economics, Signore Pantaleoni, University of Rome, Italy.

Discussion by John Bates Clark, Columbia University; Simon Nelson Patten, University of Pennsylvania; and Frank Albert Fetter, Cornell University.

(2) Theory of Wages. Frank William Taussig, Harvard University.

Discussion by George Ray Wicker, Dartmouth College; Leon Carroll Marshall, University of Chicago; and Jacob H. Hollander, Johns Hopkins University.

12.30 A.M. Hotel Waldorf-Astoria.

Breakfast, with reception to Foreign Guests, and brief addresses.

3.30 P.M. Hotel Waldorf-Astoria.

Round Table Conference on The Problems of Country Life in Connection with Conservation.

Discussion by Sir Horace Plunkett, Hon. James Bryce, and others.

4-6 P.M. Tea at the residence of Mrs. Clarence W. Bowen, 5 East 63d Street, for the ladies and gentlemen of the Association.

9 P.M. Hotel Waldorf-Astoria.

Reception and Entertainment, with Historical Tableaux, by the Ladies' Reception Committee of New York, Mrs. Robert Abbe, Chairman.

*THURSDAY, December 30.*

10 A.M. Chamber of Commerce, 65 Liberty Street.

Joint Session with the American Political Science Association. General Topic: The Valuation of Public Service Corporations.

(1) The Valuation of Public Service Utilities. Henry C. Adams, University of Michigan.

(2) The Valuation of Public Service Corporations. W. H. Williams, New York.

(3) Official Valuation of Private Property. Frederick W. Whitridge, New York.

(4) An Argument against an Official Valuation of Railroad Properties. Joseph P. Cotton, Jr., New York.

(5) Discussion by Justice E. B. Whitney, New York City; Victor Rosewater, Omaha, Nebr.; Charles F. Mathewson, New York City; and A. C. Pleydell, New York City.

1 P.M. Chamber of Commerce, 65 Liberty Street.

Luncheon to members of the American Economic Association and the American Political Science Association.

3 P.M. Chamber of Commerce, 65 Liberty Street.

General Topic: Trusts.

(1) The Causes of Trusts and some Remedies for Them. Francis Walker, Washington, D. C.

(2) The Legal Aspect of Trusts. Victor Morawetz, New York.

Discussion by Jeremiah W. Jenks, Cornell University.

8 P.M. Hotel Waldorf-Astoria.

Business Meeting of the Association. Reports of Committees. Election of Officers.

*FRIDAY, December 31.*

10 A.M. Hotel Waldorf-Astoria.

General Topic: Taxation.

(1) The Progress of Taxation during the past Twenty-five Years and Present Tendencies. Edwin R. A. Seligman, Columbia University.

Discussion by Frank LeRond McVey, University of North Dakota; Henry Higgs, Royal Economic Society, London, Eng.

(2) Assessment of Property. Lawson Purdy, Department of Taxes and Assessments, New York.

Discussion by J. G. Schurman, J. G. Martin, T. N. Carver, Jas. L. Cowles, R. R. Bowker, Royal Meeker, Benjamin C. Marsh, K. K. Kennan, E. W. Bemis, and A. R. Foote.

## *BUSINESS MEETINGS AT NEW YORK CITY.*

DECEMBER 27-31, 1909.

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A meeting of the Executive Committee was held in the room of the Faculty of Political Science in Columbia University on Tuesday, December 28, at 3.30 P. M. There were present President Dewey, Messrs. J. B. Clark, F. W. Taussig, E. R. A. Seligman, Fabian Franklin, F. B. Hawley, H. R. Seager, David Kinley, E. W. Kemmerer, J. H. Hollander, F. H. Dixon, and T. N. Carver.

On motion of Professor Taussig it was voted that the next meeting of the Association be held independently of the American Historical Association.

On motion of Professor Hollander it was voted that the question of the place of meeting in 1910 be referred to a committee of three, to be appointed by the chair. Messrs. Hollander, Carver, and Gray were appointed such a committee.

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A business meeting of the Association was held Tuesday, December 28, at 9.30 P. M., at University Commons, Columbia University, at the close of the Anniversary Meeting. President Dewey called the meeting to order. The report of the Secretary for the year was read and, on motion, accepted.

### REPORT OF THE SECRETARY TO THE AMERICAN ECONOMIC ASSOCIATION.

DECEMBER, 1909.

The regular spring meeting of the Executive Committee was held at the National Arts Club, in New York, March 13, 1909. Professor Seligman, as chairman of the Local Committee on the Twenty-fifth Anniversary,

presented a report outlining the plans for the anniversary meetings. The report was accepted.

Professor Hollander, as chairman of the Publication Committee, reported that there was to be no fundamental change during the present year in the publication policy of the Association, but that an effort would be made to reduce the amount of material. The report was accepted, and it was voted that the question as to what and how much to publish during the present year be left to the chairman of the Publication Committtee and the Secretary of the Association, with power. It was also voted that it was the sense of the Executive Committee that the Editor of the *Economic Bulletin* possessed full powers in regard to the appointment and removal of sub-editors, as well as the acceptance, recision, and rejection of material.

The Secretary reported that a contract for the printing of the *Association Quarterly* had been made with the Princeton University Press, Princeton, N. J.; but that no satisfactory arrangement had yet been made with any publishing house to act as a sales agent. The report was accepted.

No regular fall meeting of the Executive Committee was held, but a meeting was held on October 11, 1909, at the Metropolitan Club, New York, of the Local Committee on the Twenty-fifth Anniversary, and representatives of the American Economic Association, the American Historical Association and the American Political Science Association. Our Association was represented by the President and Secretary. It was voted that the tentative program as arranged by the local committee be approved by the meeting.

During the past year the Association has continued the publication of the *American Economic Association Quarterly* and of the *Economic Bulletin,* also a quarterly

publication. The first number of the *Association Quarterly* was a book of 432 pages, containing the papers and proceedings of the last annual meeting. The second number was the Handbook of the Asosciation, 59 pages. The third number was a substantial monograph of 379 pages on "The Printers," by Professor George E Barnett. The fourth number is a smaller monograph of 95 pages on "Life Insurance Reform in New York," by Professor William H. Price. The four numbers make a bulky volume of 965 pages, without advertisements, containing a large number of papers, addresses, and brief discussions of economic topics, besides two independent monographs, embodying the results of years of careful research by two specialists.

The four numbers of the *Economic Bulletin* make up another volume of 438 pages, devoted to book reviews, an annotated and classified bibliography, personal notes, news from the various fields of economic research, and other items of interest to students of economics. The two volumes together thus include 1403 pages of material of widely varying kinds, from bibliographical and personal notes to substantial monographs, all of it of a kind to interest economists, and most of it of a kind that can be obtained nowhere else.

These facts are mentioned, first, to show the members of the Association how much in the way of printed matter they are getting for their membership fee of $3, aside from the other advantages of membership; second, to show why the finances of the Association will remain in a somewhat unsatisfactory state unless we do one of three things: (1) increase our membership, (2) increase the anual dues, or (3) reduce our publications. Of these three possibilities, the first seems to the Secretary to be the most attractive.

The fact that the Association is now acting as its own publisher, or selling agent, adds considerably to the work of the Secretary's office and makes necessary some increase in the expenditure for clerical help.

During the year, up to December 22d, the following changes in the membership and subscription lists have occurred:

| | | |
|---|---|---|
| New members added, including one life member | 424 | |
| New subscribers added | 8 | |
| Total additions | | 432 |
| Old members dropped for non-payment of dues | 67 | |
| Old members resigned | 13 | |
| Old members died | 12 | |
| Old subscriptions discontinued (including duplicates) | 8 | |
| Total substractions | | 100 |
| Net gain | | 332 |
| Net gain in paying members and subscribers (omitting those dropped for non-payment of dues) | 399 | |
| Total number of members, December 22, 1909 | 1205 | |
| Total number of subscribers, December 22, 1909 | 155 | |
| | | 1360 |
| Independent subscriptions to *Bulletin* | 18 | |

Invitations to hold our annual meeting for 1910 in various cities have been received as follows:

From the Governor of the State of Missouri, the Mayor of the city of St. Louis, the Business Men's League, the Merchants' Exchange, the Missouri Manufacturers' Association, the Million Population Club, and various citizens of St. Louis, Mo.

From the Governor of the State of Minnesota, the University of Minnesota, the Commercial Club of Minneapolis, and citizens of Minneapolis and St. Paul, and the invitation of last year has been renewed.

From the Toledo Chamber of Commerce and various citizens of Toledo, Ohio.

From the Atlantic City Bureau of Publicity, the Atlantic City Board of Trade, the Atlantic City Hotel Men's Association, the Atlantic City Business League, and various citizens of Atlantic City, N. J.

Invitations had previously been received from similar bodies in Indianapolis, and these have been renewed. One has also come from Old Point Comfort, Va.

These invitations are on file in the temporary office of the Secretary at the Waldorf-Astoria, and are open to any member of the Association who desires to read them.

Communications have been received from the George Washington Memorial Association, and the Council of Jewish Women, asking this Association to pass resolutions in favor of various public measures. These communications are also on file in the temporary office of the Secretary, and can be read by any member of the Association who desires to do so.

The removal of well-known members of the Association by death has been chronicled from time to time in the personal notes of the *Economic Bulletin*. It is, therefore, unnecessary for the Secretary to give extended notices here. Among the shining marks whom death has chosen during the past year the following should be mentioned:

Ernest von Halle,
Henry Charles Lea,
Simon Newcomb,
Max West,
Carrol D. Wright,
Lester Zartman.

Respectfully submitted,

T. N. Carver,

*Secretary American Economic Association.*

The annual report of the Treasurer was next read and accepted for audit.

T. N. CARVER, TREASURER, IN ACCOUNT WITH THE AMERICAN ECONOMIC ASSOCIATION, FROM DECEMBER 21, 1908, TO DECEMBER 22, 1909.

*I. Receipts and Expenditures.*

*Debits.*

| | | |
|---|---|---|
| Cash on hand at last Annual Meeting.......... | | $1460.39 |
| Dues .......................................... | $3660.83 | |
| Subscriptions to *Quarterly* (including *Bulletin*).. | 619.55 | |
| Separate subscriptions to *Economic Bulletin*.... | 28.70 | |
| Sales of *A. E. A. Quarterly*..................... | 670.69 | |
| Sales of *Economic Bulletin* ..................... | 15.00 | |
| Interest ....................................... | 139.34 | |
| | | 5134.11 |
| | | $6594.50 |

*Credits.*

| | | |
|---|---|---|
| *A. E. A. Quarterly*—Editorial.................... | $312.50 | |
| *A. E. A. Quarterly*—Printing..................... | 2370.91 | |
| *Economic Bulletin*—Editorial..................... | 1115.66 | |
| *Economic Bulletin*—Printing...................... | 1136.26 | |
| Office Salaries ................................ | 751.69 | |
| Traveling expenses.............................. | 46.28 | |
| Stationery, including office printing............... | 183.69 | |
| Office postage ................................. | 221.52 | |
| Telephone and telegraph......................... | 7.47 | |
| Express, freight, and cartage.................... | 39.43 | |
| Supplies ....................................... | 153.06 | |
| Rent ........................................... | 10.42 | |
| Insurance ...................................... | 46.50 | |
| Annual Meeting.................................. | 104.43 | |
| Miscellaneous .................................. | 54.30 | |
| | | $6554.12 |
| Cash on hand, December 22, 1909........................ | | 40.38 |
| | | $6594.50 |

*II. Cash Assets and Liabilities.*

| *Assets.* | | *Liabilities.* | |
|---|---|---|---|
| Bonds held as per certificate exhibited .. | $3119.63 | Bonds at cost price. | $3119.63 |
| Bank balance, as per bank book exhibited, less checks drawn but not paid, amounting to $127.26 | 40.38 | Balance in Cambridge Trust Company (less checks Nos. 100, 104, 105, 108, 109, 114, 115, 116, 126, 127, amounting to $127.26) ....... | 40.38 |
| | $3160.01 | | $3160.01 |

The total cash and invested funds (cost price) in the treasury of the Association on December 22, 1909, amounted to $3160.01, a decrease of $1420.01 as compared with December 21, 1908, the date of the last Treasurer's report. As stated in that report, there were at that time certain expenses of the preceding year for which bills had not been received and which were, consequently, still unpaid. These expenses, amounting in the aggregate to $1418.64, chargeable to the account of last year, but paid during the present year, materially reduced the cash balance available for the payment of this year's expenses. Besides, there were some unusual expenses made necessary by the moving of the office of the Secretary-Treasurer from Princeton to Cambridge, the setting up of a new office, etc. Over against these, however, must be set three items which make the accounts for this year less favorable than they seem from the foregoing statement. In the first place, there are certain expenses of the present year, estimated at $650, for which bills have not yet been received, and which are, therefore, still unpaid. In the second place, the bills for membership dues sent out in September were, in accordance with a previous vote of the Association, made out for $4 instead of $3, to cover one and one-third years instead of one year; that is, from September 1, 1909, to De-

cember 31, 1910. This was for the purpose of making all memberships run for the calendar year. During the year 1910, therefore, there will be no membership dues accruing in September as hitherto. In the third place, more than a hundred new members have joined our Association during the months of November and December, and, in most cases, they were entered for the calendar year 1910 and their dues were credited accordingly. The dues of these members will not again replenish the treasury until the year 1911. Therefore, the fiananccs of the Association, though much improved during the present year, are not yet in an entirely satisfactory condition.

In the last Treasurer's report this unsatisfactory condition was pointed out, and it was suggested that during the year 1909 it would probably be necessary to sell some part of the securities held. This has thus far been avoided by the considerable increase in membership fees. However, the cash balance was entirely exhausted in July, and the Treasurer was compelled to choose between the alternative of selling one of the bonds and that of negotiating a temporary loan. He chose the latter, and, on July 27, borrowed, in the name of the Association, $500 for three months. The dues accruing in September, together with the new membership fees, have enabled the Treasurer to pay off this note and to finish the year with a small cash balance, and with the invested funds still intact. These funds are, therefore, the same as at the last report, *viz.*: three $1000 (par) bonds of New York City, maturing in 1917 and yielding 4½ per cent per annum. However, it will again be necessary to consider the selling of some of our securities during 1910, unless the Association chooses one or the other of two alternatives: first, to increase our membership still further; second, to reduce our expenses. Inasmuch as the only feasible method of reducing our expenses is to drop

some of our publications, the first alternative seems most desirable.

In the last Treasurer's report attention was called to the fact that a previous annual decline in revenue from membership dues had already been arrested, and that there had been considerable increase during the year 1908. The present Treasurer is glad to report a still further increase of revenue from this source during 1909, as shown in the following table. For the past six years the receipts from this source have been as follows:

| Year | Receipts |
|---|---|
| 1904 | $2340 00 |
| 1905 | 2225 75 |
| 1906 | 2088 59 |
| 1907 | 1842 60 |
| 1908 | 2442 37 |
| 1909 | 3660 83 |

The gross receipts during the past year have amounted to $5134.11, an increase of $643.10 over the receipts of 1908. The gross expenditures during the same period have amounted to $6554.12, an increase over the expenditures of 1908 of $1453.91.

Following the excellent precedent established by his predecessor, the Treasurer ventures to embody in this report a forecast of the probable income and expenditure for the year 1910, assuming a continuation of the present publication policy. The estimated receipts and expenditures are as follows:

| Item | Amount | Total |
|---|---|---|
| Quarterly publications | 1700 | |
| Bulletin | 2200 | |
| Office of Secretary-Treasurer | 1800 | |
| Miscellaneous | 200 | |
| | | $5900 |
| Dues | $3000 | |
| Sales and subscription | 1500 | |
| Miscellaneous: life members and interest | 250 | |
| | | $4750 |
| Net annual deficit estimated | | 1150 |

For 1911, however, the outlook is decidedly more favorable, because during that year the treasury will again be in receipt of the annual dues of the new members received during November and December of the present year, and of those old members who, last September, paid their dues for a year and a third.

Respectfully submitted,
T. N. CARVER, *Treasurer.*

---

Professor Hollander presented the following report on behalf of the Publication Committee:

REPORT OF THE CHAIRMAN OF THE PUBLICATION COMMITTEE.

During the current year, as heretofore, the functions of the Publication Committee have been limited, pending a general reorganization of the Association's publishing activities, to the selection and general editorial supervision of the monographs issued by the Association. All matters pertaining to the *Economic Bulletin* have been determined by its board of editors, subject to the ultimate control of the Executive Committee. The Annual Proceedings have been edited, and the printing of manuscripts—monographs as well as Proceedings—has been supervised by the Secretary. Finally, consideration of the future publication policy of the Association has been committed to a special committee on publications, whose report will be submitted to this meeting.

The Publication Committee, in accordance with the spirit of the instruction given at the last annual meeting, has sought to reduce somewhat the bulk of the Association's publications. With this in view, recourse was had to the practice of earlier years of issuing only two, instead of three, independent monographs. In order to avoid the inconvenience of splitting the Proceedings into two numbers, and yet not imperil mailing privileges, the

Handbook of the Association was given notation in the series. The issues of the year were, accordingly:

1. Proceedings of the Twenty-first Annual Meeting, pp. 432.

2. Handbook of the Association, pp. 59.

3. "The Printers," by George E. Barnett, pp. 379.

4. "Life Insurance Reform in New York," by William H. Price, pp. 95.

In consequence of the unexpected bulk of No. 1 of the Proceedings, *viz.:* 432 pages, as compared with 311 pages in 1908, and 268 pages in 1907, the total pagination of Volume X will probably be fully as great as in preceding years. Your committee did not, however, deem it wise to further reduce the number of monographs, nor to compel the curtailment of those before accepted, especially in view of the removal of financial pressure incident to a notable increase in membership.

Your committee ventures the opinion that the publications of the year maintain the standard of monographic publication heretofore established. It will, doubtless, be possible to continue this with indeed, as heretofore, some reasonable degree of progressive improvement, as the number of monographs selected each year become less and the consequent field of selection relatively greater.

Your committee beg to renew their recommendation that the publishing responsibilities and activities of the Association, now divided between the Secretary's office, the Board of Editors, and the Publication Committee, be unified in a single agency.

Respectfully submitted,

Jacob H. Hollander,

*Chairman.*

Professor Kemmerer then presented his report as Managing Editor of the *Economic Bulletin.*

REPORT OF THE MANAGING EDITOR OF THE ECONOMIC BULLETIN.

The report of the Managing Editor of the *Bulletin* this year will be brief, as it will be concerned entirely with the record of the past year, the question of the future *Bulletin,* together with that of the *Quarterly,* having at the Atlantic City meeting been placed in the hands of a special committee, which has been studying the question for a year and is to report tonight.

The scope of the *Bulletin* this year, as last, has been that determined by the Association in 1906, and covers three departments: (1) Personal and miscellaneous notes; (2) book reviews; (3) bibliographical notes. In the first number of the year is printed the annual list of doctoral dissertations in economics.

Little need be said of the contents of the *Bulletin* during the year just closing. You have received the four regular numbers, and they have told their own story, both as to their merits and their defects. A brief summary, however, of the contents of Volume II may be suggested. A rough count of the items gives the following results: The volume of 1909 contains 438 printed pages, 63 pages of which were given to personal and miscellaneous notes, 203 to book reviews, 7½ pages to the list of doctoral dissertations, and 148 pages to bibliographical notes. Viewed by items, there were 199 personal and miscellaneous notes, including seven obituary notices; 130 books were reviewed; there were 1063 bibliographical notes of books, of which 284, or 27 per cent, were annotated; there were 1274 bibliographical notes of magazine articles, of which 641, or 50 per cent were annotated, and there were 765 notes of book reviews. Aside from the

list of doctoral dissertations, the *Bulletin* for the year just closing contained over 3400 separate and distinct items.

The editorial staff during the year has remained unchanged. Although the staff is large, I am glad to bear witness to the hearty coöperation which nearly every one of the twenty-two departmental editors has given during the year just closed. A considerable number of members of the Association who are not on the editorial staff have also rendered valuable assistance in the furnishing of personal and miscellaneous notes, the preparation of the classified list of recent publications, and in the writing of reviews.

The finances of the *Buleltin* are in the hands of the Secretary-Treasurer, to whom all bills, except those incidental to the clerical work of the Managing Editor's office, are paid. These matters will doubtless be covered by the report of the Secretary-Treasurer. The account for incidental expenses for the period December 24, 1908, to December 26, 1909, is as follows:

*Receipts*

| | | |
|---|---|---|
| Balance on hand | $23.55 | |
| Cash received from Secretary-Treasurer | 300.00 | |
| Cash received for redemption of old stamped envelopes | .49 | |
| | | $324.04 |

*Expenses*

| | | |
|---|---|---|
| Postage, express, freight, import duties, and telegrams | $63.32 | |
| Clerk hire | 190.19 | |
| Bibliographical periodicals and publishers' address books | 15.63 | |
| Stationery and other office supplies | 14.66 | |
| | $283.80 | |
| Balance on hand | 40.24 | |
| | | $324.04 |

Bills to the amount of about $15 will fall due January 1st.

Professor Kinley presented a preliminary report as chairman of the committee appointed to consider the future publication policy of the Association.

On motion it was voted that the President appoint the following committees:

1. A Committee on Nominations.
2. An Auditing Committee.
3. A Committee on Resolutions.

The chair appointed, for the Committee on Nominations, Messrs. Clark, Taussig, Ely, Patten and Jenks; for the Committee on Resolutions, Messrs. Fillebrown, Daniels and Breckenridge; for the Auditing Committee, Messrs. Duncan and Barnett.

The Association then adjourned.

---

A meeting of the Executive Committee was held at the Waldorf-Astoria on Thursday, December 30, at 7.45 P.M. There were present President Dewey and Messrs. Patten, Clark, Seager, Wicker, Gray, Hawley, and Carver.

It was voted to reconsider a former motion to the effect that the next meeting of the Association be held apart from the American Historical Association.

It was voted to recommend that the question of the place of the next annual meeting be left to this committee, with power.

Adjourned.

ADJOURNED BUSINESS MEETING OF THE ASSOCIATION, AT THE WALDORF-ASTORIA, THURSDAY, DECEMBER 30, 1909.

The adjourned session of the Association was called to order by President Dewey at 8 P. M.

The Committee on Nominations reported, through its

chairman, Professor J. B. Clark, recommending the following list of men for office for 1910:

For President, Edmund J. James, President of the University of Illinois.

For Vice-Presidents, Prof. F. L. McVey,
Prof. H. J. Davenport,
Prof. Alvin S. Johnson.

For Secretary and Treasurer, Prof. T. N. Carver.

For the Publication Committee, Prof. J. H. Hollander (chairman),
Prof. C. J. Bullock,
Prof. James W. Crook,
Prof. David Kinley,
Prof. C. W. Mixter,
Prof. William A. Scott.

For Editor of the *Economic Buleltin,* Prof. E. W. Kemmerer.

For the Executive Committee (term to expire in 1912), Prof. H. R. Seager,
Prof. F. H. Dixon.

On motion, the Secretary was instructed to cast the vote of the Association for the gentlemen named.

The Committee on Resolutions then recommended the following resolution:

"In sincere appreciation of the signal hospitality, and the varied and elaborate program of entertainment provided for the American Economic Association and enjoyed during their quarter-centenary celebration in the city of New York, be it

"*Resolved,* That the Association direct their Secretary formally to record in their minutes and to transmit to the hosts of the Association the expression of their sense of obligation and gratitude for the high pleasure and lively satisfaction experienced by their members in the

manifold courtesies extended to them in the course of the meeting, and more particularly to convey their heartfelt thanks to

"The Honorable Charles Evans Hughes, Governor of the State of New York;

"His Honor George Brinton McClellan, the Mayor of the City of New York;

"The Honorable Joseph Hodges Choate, chairman of the Citizens' Meeting of Official Welcome;

"The President and Board of Trustees of Columbia University;

"The Academy of Political Science of the City of New York;

"The New York Historical Society;

"The New York Genealogical and Biographical Society;

"The Chamber of Commerce of the State of New York;

"The City Club of New York;

"The Metropolitan Life Insurance Company;

"The Citizens' Committee of One Hundred;

"The Ladies' Auxiliary Reception Committee;

"The Columbia University Reception Committee;

"Mrs. Clarence W. Bowen;

"Mrs. Robert Abbe;

"Mr. and Mrs. William K. Vanderbilt; and

"Messrs. William M. Sloane, Clarence W. Bowen, Edwin R. A. Seligman and Samuel McCune Lindsay, the untiring and efficient members of the Joint Anniversary Committee.

"C. B. Fillebrown,
"Winthrop Moore Daniels,
"R. M. Breckenridge,
*"Committee on Resolutions."*

On motion, the report of the Committee on Resolutions was unanimously adopted.

The Auditing Committee presented the following report:

Your Committee have examined the statements and books of the Treasurer and find the items contained in said books, compared with the account as rendered, show a balance on deposit with the Cambridge Trust Company, Cambridge, Mass., of $40.38, and a certificate from the Cambridge Trust Company showing that the Treasurer has on deposit in the vaults of the Cambridge Trust Company bonds Nos. 430, 431 and 432, amounting to $3000 at par value. Your committee recommend the acceptance of the Treasurer's report.

The committee have also examined the statements of the Editor of the *Bulletin,* and find proper vouchers for all expenditures.

(Signed)
John C. Duncan,
George E. Barnett.

---

Professor David Kinley, chairman of the committee appointed to consider the future policy of the Association with respect to publications, presented the following report:

Your committee appointed to consider and report on the unification of the publication activities of the Association beg to make the following recommendations:

1. That the *Bulletin* be enlarged, and so changed in character as to be made into a journal similar, for example, to that of the Royal Economic Society, with some additional features, including the expansion and increase of the number of abstracts of important articles in the journals of the various languages; a department of personal notes: book reviews, etc.

2. That the journal be a quarterly.

3. That the journal be called the *American Economic Review.*

4. That the monographic material be continued, either as separate numbers of the quarterly, or as continued articles, or as supplements.

5. That a Managing Editor and a board of six associate editors be elected to conduct the *Review*, and that they take over the duties of the present Publication Committee and those of the editorial staff of the *Bulletin*, together with the editorial and publication activities of the Secretary's office.

6. That a salary of $1500 a year be paid the Managing Editor.

7. That the Managing Editor be elected for a term of three years.

8. That the first board of associate editors be elected, two members for three years, two for two years, and two for one year; and that thereafter two associate editors be elected each year for a term of three years.

9. That the Executive Committee be authorized to make appropriations for all necessary expenses incident to the preparation and publication of the *Review*, in addition to the salary of the Editor.

10. That the present publications be continued until arrangements for issuing the new publication are perfected, but not later than December 31, 1910.

11. That the present committee be continued one more year, with power to carry out the instructions of the Association concerning the *Review*, to select a Managing Editor for the first term of service, and to raise a guarantee fund for the proposed *Review*, if thought necessary or advisable.

Presented by

D. Kinley,
*for the Committee.*

On motion, the report was adopted.

*Voted,* To refer the place of meeting in 1910 to the Executive Committee, with power.

*Voted,* To refer the question of additional editorial help on the *Economic Bulletin* to the Executive Committee, with power.

*Voted,* To authorize the Executive Committee hereafter to appoint an Auditing Committee in advance of the annual meeting, and to instruct this Auditing Committee to examine the Treasurer's books at the place where they are kept, and to report at the annual meeting.

On motion of Mr. Rosewater, it was

*Voted,* That in making up the next list of members for publication, the Secretary be requested to affix to the name of each member the year from which dates his continuous membership.

The Association then adjourned.

T. N. CARVER,
*Secretary.*

American Economic Association
Quarterly

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THIRD SERIES
Vol. XI, No. 3

ISSUED QUARTERLY
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# THE CHILD LABOR POLICY OF NEW JERSEY

by

ARTHUR SARGENT FIELD, Ph.D.

OCTOBER, 1910

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## PREFACE.

The purpose of this monograph has been to give an account of the origin and growth of the policy of New Jersey toward the employment of children. That is understood to mean more than a chronological compendium of the law on the subject. A more explicit statement of the conception of the study, of the plan for its presentation, and of the limitations upon the attainment of the purpose have been given in the introduction.

The field work was done during the summer and fall of 1908. The work on the documents and other records was completed and the whole was written during the winter of 1908 and 1909. It has not been practicable since then for the writer again to visit New Jersey in order to get in personal touch with the present situation. Therefore, the material for bringing the monograph down to date has been secured solely through correspondence.

The writer takes this occasion to acknowledge with gratitude his indebtedness to a number of employers, employees, officers of labor organizations and philanthropic societies, administrators of charity, school and other public officials who have contributed to the making of this study. It would require undue space to name each of these, but special mention should be made of Professors Henry W. Farnam and Clive Day of Yale University for direction in the preparation of the investigation; Commissioner of Labor Lewis T. Bryant for much of his time, for access to the records of his department and for the privilege of accompanying the

deputy inspectors; Mr. Owen R. Lovejoy for access to the files of the National Child Labor Committee, of which he is the Secretary. Acknowledgment is here made also of financial assistance in making the investigation from the Carnegie Institution of Washington. Recognition is also due for much patient assistance by the writer's wife in the analysis and preparation of the considerable amount of statistical data examined for the study.

ARTHUR SARGENT FIELD.

Hanover, N. H., July 1, 1910.

## CONTENTS

CHAPTER. PAGE.

I. Introduction ........................................ 1

SPORADIC POLICY.

II. Early Protection for Child Employees.
Pauper and Apprenticed Children.................. 7
Factory Children................................ 9
Child Labor Conditions Before 1851................ 10

III. Spasmodic Beginning of General Policy.
Growth in Law: Child Labor Law of 1851.......... 12
Compulsory Attendance Law of 1874.............. 15
Observance and Results: The Child Labor Law.... 16
The Compulsory Attendance Law................ 19
Conditions at the End of the Period................ 23

A SETTLED POLICY: THE STANDARD.

IV. Limited and Uninformed Public Sentiment: 1883 to 1904.
The Child Labor Law of 1883...................... 29
Minimum Age Limit.............................. 36
Minimum School Attendance..................... 41
Minimum Physical Condition..................... 43
Hours for Children: Laws of 1883 and 1885........ 44
Efforts to Increase the Restrictions on Hours.... 46
The Fifty-five Hour Law of 1892................ 47
Health and Safety of Children.................. 49
Compulsory Attendance: Law of 1885............ 52
Defects of the Attendance Law.................. 54
Efforts to Strengthen the Attendance Law......... 57

V. A General and Informed Public Sentiment: Since 1904.
The Widening Interest in Child Labor............ 62
Agitation for Better Inspection.................. 63
Agitation for a Better Law...................... 68
The Bill of 1904................................ 72
Provisions of the Act of 1904.................. 77
Supplementary Measures: Extension of Policy to Other Employments........................... 85
Night Work for Children...................... 88
Judicial Interpretation........................... 93
The Compulsory Attendance Law: Act of 1903... 93
Provisions of the Law.......................... 94
Supplementary Acts since 1903................... 99

VI. Merits and Defects of the Present Standard
Pertaining to the Age Limit.......... 101
Pertaining to Physical Fitness.......... 117
Pertaining to Needy Children.......... 118
Pertaining to Hours for Children.......... 120
Pertaining to Health and Safety.......... 121

A Settled Policy: Enforcement.

VII. Provisions for Enforcement.
Growth of a Corps of Inspectors: The Act of 1883.. 123
The Enlargement of the Corps.......... 124
Appointment and Removal.......... 129
Salaries.......... 130
Provision for Women Inspectors.......... 131
Jurisdiction of Inspectors.......... 134
Power of Inspectors: Power to Enter Factories.... 136
Power to Discharge Children.......... 138
Required Attention to Duty.......... 138
Politics and Personel: The Chief Inspector.......... 140
The Deputy Inspectors.......... 144
Administration of the Work: Oroganization.......... 149
Work of the Women Inspectors.......... 153
Policy as to Enforcement.......... 155
Prosecutions .......... 155
Compulsory Attendance: 1883 to 1904.......... 157
Compulsory Attendance: Since 1904.......... 161

A Settled Policy: Success.

VIII. Success of the Policy: 1883 to 1904
Minimum Age Limit.......... 169
Minimum School Attendance.......... 188
Minimum Physical Condition.......... 191
Hours for Children.......... 191
Health and Safety.......... 195
Compulsory Attendance.......... 195

IX. Success of the Policy: Since 1904.
Conditions Favorable to Observance.......... 198
Conditions Unfavorable to Observance.......... 199
Minimum Age Limit.......... 202
Hours for Children.......... 213
Health and Safety.......... 215

X. Summary and Present Opinion.......... 217

# CHAPTER I.

## INTRODUCTION.

Child labor legislation is part of the whole body of legislation for social control that has grown with the consciousness of social relationships and of social influences upon the well-being of individuals and with the humanitarian zeal for removing from such relationships all disadvantage upon individuals. It cannot be fully explained apart from that general body of social legislation. Yet convenience insists that it be examined by itself. This is possible with as little disturbance to conclusions in the case of child labor legislation as for any other part of social legislation, for it has been of more independent origin. The sense of the child's relative helplessness has always been keener than that of the need of adult individuals; and social regulations in the child's behalf have developed faster than those of more general application.

In these days the unfolding of such a code of laws is rightly held to be a complex historical process. An account of child labor legislation should regard it as a growth of social policy reflecting all the influences that operated among a people to commit them to the purpose of the policy and to increase the definiteness of their purpose and the efficiency of the measures of control used to accomplish that purpose. The enactment of the law is but the outcome of the gradual discernment of the need, of agitation by leaders of that opinion, of the slow conviction of the public subject to inertia and vari-

ous conflicting interests. The improvement of the law and the vigor of its enforcement grow only with experience and failure and with the adding of public zeal to public conviction in behalf of the object set out for. The emergence of this social determination and of its increase in wisdom is the very thing of interest, rather than the chronological compendium of the laws which are passed under its pressure.

This aspect of the subject as one of state policy, however, does not imply that there has always been, or indeed even is yet, in the minds of the people or of the legislators a well defined purpose and a clearly worked out plan for carrying it through. Those are matters of growth. When a policy is put forward, not even its promoters have a clear perception of it in all of its parts. And such precision as they might give it is hindered by the necessity of compromise at one point and another with the opponents of the proposal. But there is discernable a constant approach toward a clearer purpose and a more systematic plan, which constitutes a growth of policy.

It may be objected to this view of child labor legislation that a great part of such laws are passed to placate an insistent group of agitators merely, and therefore do not represent a true policy of the whole people, most of whom are indifferent to the matter. There must be recalled here, however, the difference between the people of the state and the government as the agency of the state. The position taken on questions of state policy by those who compose the government may differ from that of the people. How much will depend upon the responsiveness of the government to the opinion and feeling of the people. This difference may be not only in disregard of the people or antagonistic to them, but also in

advance of them. State policies may thus be adopted which at the time lack a universal support, but which gradually receive the full indorsement and active support of the whole people. It is in that connection that many of the enactments of unsupported proposals appear as stages in the rise of a true state policy and get their importance because of that relation to a growth.

Again, the question of policy involves the rejection of proposals as well as their adoption. Hence the absence of universal support, instead of throwing the whole matter out of discussion from this viewpoint, is merely a thing to be noted as evidencing the negative attitude of the people for the moment toward the proposal.

Although it is most desirable to cast an account of child labor legislation in the form of a history of social policy, any such discussion must fall short of revealing the growth of the policy from all of its origins. Every law is recorded for the historian's examination, but not every attempt to make law and, much less, all the information bearing on the origin, the strength, and the practical sense of the agitation for law, and of the public pressure behind its enforcement. Frequently, all that can be discovered is the bare skeleton of the legislation on the matter. As might be expected, much more is possible with the later years in the present case than with the earlier periods.

It will contribute to a clearer discussion from this point of view to inquire here what should properly be considered in a review of a state policy. First to note is the object set out for. In the present case this is usually to fix a standard limiting the conditions on which children may be employed. This is the fundamental question, but not the only important one. When that is agreed upon, there remains

the legal definition of the standard and the mandate concerning it. This is a question of clearness in the law and of proper foresight and provision for the administrative difficulties and incidental effects to be encountered in compelling conformity to the standard. Many a law prescribing a policy has missed its purpose because it failed to define and decree its standard with such precision that all individual lapses from the intended standard could be covered without question by the terms of the law; and many laws have failed of enforcement because the policy of the state, according to the terms of the law, could not be pushed without working results not intended and not desired; and hardly a law has been passed that has not failed in some measure because of administrative weakness through failure to provide against contingences and devices that permitted its evasion. A third factor in any state policy is the provision for enforcement. A standard set up and a legal definition of it with a mandate concerning it will never be more than a pious resolution unless it has adequate provision for carrying it into effect. The provision for enforcement involves the definite location of responsibility for enforcement upon specific officers with ample powers. If a policy be regarded as an endeavor to work definite results, a discussion of the growth of the state's policy toward child employment should note how far each of the foregoing elements, necessary to an effective policy, have been present from time to time. This will often require a degree of detail that might be foregone if the interest were in the standards of the policy alone.

Such an account should include also a measurement of the results secured. How far was the policy actually carried out, and how far was the object actually accomplished? This is the most important part of the account,

for the results desired are the *raison d'être* of the whole policy. It is an unfortunate circumstance, however, of any legislative policy that its effects can hardly, if at all, be distinguished and measured apart from the complex of results following upon the many entangled contemporary forces. More unfortunate still is the undeveloped sense of the importance of and the understanding for making careful current record of evidences which will in time reveal such effect of a policy as it may be possible to distinguish. The want of satisfactory means of determining results is often accepted as reason for abandoning the effort. But the prime importance of answering as far as possible the so-called practical man's question, "What good did it all do?" commands rather that whatever evidence may be at hand shall be carefully measured and its force added to the composition in order to secure the best resultant possible.

The development of child labor legislation in New Jersey falls, chronologically, into four periods which are characterized by their degree of approach to the above noted elements of a clearly defined and vigorously pursued policy. First, there is the early protection to child workers in certain relations which had long been afforded. Second, there is the period from the first act of 1851 to 1883 during which an inconstant and ineffectual beginning was made toward a general policy. A more earnest, more intelligent, yet critically imperfect and poorly supported endeavor fills the third period from 1883 to 1904. Finally, since 1904 a well planned and well executed policy has received general support.

The ambition of this monograph is twofold. First, it hopes to convey to the reader as clearly as possible the conception of the child labor policy of New Jersey as the expression of a truly evolutionary development in the

case of each of the elements of a successful policy; that is. in the case of the standard to be striven for and its definition in the law, and in the case of the administrative provision for enforcing the social will. Whether this object can be better attained by considering all of the features of the policy for each period in turn, or each feature in turn through all the periods, is a question which will be answered according to the individual's habits of mind in grasping the evolutionary significance of historical movements. The writer has chosen to present the matter, except for the earlier periods, in the latter fashion because to him that seems the most illuminating form in which to place it. In the case of the periods before 1883, the attitude of the state is so imperfectly developed that it seems better to carry forward all lines of the narrative at the same time.

## CHAPTER II.

### EARLY PROTECTION FOR CHILD EMPLOYEES.

*Pauper and Apprenticed Children.*—Protection to child workers was at first very limited. The right of parents to control their children was unqualified by the public sense, yet to be developed, of the commanding interest of the child's future. This could come only with the improvement in well-being of the family which relieved it from the pressure of immediate necessities and permitted a longer view ahead. It waited also on the wider provision of public schools and such other opportunities for preparing a child for the future as would seem to be a profitable use of his time if unemployed. Thus, while restrictions upon the labor of children designed in the interest of the children were among the earliest enactments of New Jersey's independence, they had but a limited application. One class of these restrictions touched only children who were in some direct manner wards of the state and for whom the state was, on that account, bound to insure a minimum of favorable conditions for their future well-being. These were the regulations for the protection of pauper children let out to work by the poor law officials.[1] Such restrictions extended to all em-

[1] Section 18 of the act of 1774, for the settlement and relief of the poor, requires the indentures of every child apprenticed by the overseers of the poor to contain a clause obligating the master to "cause every such child and children to be taught and instructed to read and write." (*Laws of New Jersey,* Revision of 1821, p. 42.) This, however, was the only restriction in favor of the child.

In 1801 the officers of the multiplying county poorhouses were required to apprentice children in their care on the same conditions

ployments, but were limited to children who were direct wards of the state or its recognized agents. At the same time, however, there was an extension of this protective policy, through features of the regulation of apprenticeship, toward the inclusion of all employed children. This came through the provisions for protecting apprentices against the abuse of unfeeling masters.[2]

The protection to apprentices offered the form of protection to all children employees so far as apprenticeship was the relation of employment for children of the day. But in reality it was always limited and became more so. There was no minimum age at which children might be put to work; there was no restriction on the hours per day or on night work; there was no restriction on the sort of work a child might do. And even the protection offered in the law was not guaranteed by any adequate provision for its enforcement against masters on whom the apprentices might be economically or socially dependent. Consider also the disuse into which the appren-

as the above. (*Public Laws,* 1801, p. 108.) This was reënacted as part of the revised act of 1820. *Pub. Laws,* 1820, p. 166.

When the Mount Lucas Orphan and Guardian Institute was incorporated in 1845, it was empowered to apprentice children entrusted to it to any occupation or employment. But it could not do so, in the case of boys, until they were fourteen years old, or, in the case of girls, until they were twelve years old, and in neither case "until such child, having capacity to learn, shall have been taught to read and write." (*Public Laws,* 1845, p. 107.) This was the first application of a minimum age limit to the employment of children in New Jersey that the writer has discovered.

[2] The act of 1794, prescribing the legal status of apprenticeship, provides in section 5 for redress to any apprentice against a master who is "guilty of misusage, refusal of necessary provision or clothing, unreasonable correction, cruelty, or other ill treatment." In case of such a grievance, the apprentice might appeal to a justice of the peace who might decree as the "equity of the case" might require, subject to appeal to Quarter Sessions. *Laws of New Jersey,* Revision of 1821, p. 366.

ticeship system increasingly fell, and the inadequacy of the apprenticeship laws to protect the child workers of the day is apparent. Apprenticed pauper children must have fared even worse than others. For the interest of the overseers of the poor and of the poorhouse officials to be rid of the expense of keeping their charges made them indifferent about securing for children apprenticed by them the protection which the law provided.

While the actual protection enjoyed by pauper and apprenticed children thus was very meagre, it should be noted in passing that in these regulations concerning them the policy of state interference with the employment of children in the interest of the child's future was recognized in principle in the law.

*Factory Children.*—The factory system opened an enlarging opportunity for the labor of children in manufacturing employments outside the home, and at the same time weakened the apprenticeship arrangements through which alone the law offered its meagre protection to the child worker. The new conditions called for new legislation if the state was to continue and to develop the policy of safeguarding the future interest of employed children. A seeming acknowledgment of the need and an apparent attempt to continue the policy under the changed conditions are suggested by a provision in an act of 1816. This law, designed to encourage the development of manufacturing, was enacted for a period of five years and provided general terms of incorporation for enterprises in certain specified lines of production. By section 9 of the act, the officials of factories incorporated under this law were required to have the children employed by them, whether bound by indenture or parole agreement, instructed in reading, writing, and arithmetic at least one hour each day; to give due attention to their

morals; and to see that they regularly attended some place of worship on Sunday, when within convenient distance.[3] This measure merely provided a minimum educational opportunity for child workers. It said nothing as to hours of labor, and it made no restriction on the labor of children in the dangerous iron trades or the unhealthful lead industries, both of which it sought to develop. Yet even this concession to the policy was short-lived, for in 1819 the incorporation law was repealed before the expiration of the five years. Henceforth until 1851 no measure passed the legislature for restricting in any way the employment of children in any occupation or industry.

*Child Labor Conditions Before 1851.*—With the growth of manufacturing the employment of children in manufacturing increased in New Jersey as in other manufacturing states. There is little reliable information, however, as to the number of children who came thus to be employed in the early and middle parts of the century. Two contemporary estimates have come to hand. According to one, there were in the cotton industry in 1831 as many as 217 children under twelve years of age. These constituted 4 per cent of all cotton mill operatives.[4] On that basis the number under fourteen,—the common age limit at present,—must have been a large proportion and the number under sixteen very considerable. Another estimate in 1845 for the amount of child labor at Paterson in that year gives 2327 males and 2301 females under sixteen. This totals 4628 children under sixteen, which was 42 per cent of all employees.[5]

[3] *Pub. Laws,* 1816, p. 21.

[4] Committee on Manufactures of the New York Tariff Convention in 1831, quoted in Gordon, *Gazateer of New Jersey,* 1834, p. 39.

[5] *Fisher's National Magazine,* Vol. I., p. 459. This was supplied to the writer by Mr. J. K. Towles.

But these figures are suspiciously large to accept without corroboration. It would seem probable, however, that the employment of children was becoming a matter of importance to the state.

And yet there is nothing in this evidence, or are there any implications in other indirect testimony that the writer has seen, which indicates that children of such tender age as had been found in the mills of England were employed in New Jersey in noticeable numbers. There was no class of permanent wage earners who, shut in by an unescapable and relentless competition with each other, were driven to exploit their children at the earliest year possible. Children worked as soon as they could, but not in factories. The number and proportion of young children employed in factories was undoubtedly increasing, but it is not probable that the number under ten years of age was noticeable.

## CHAPTER III.

### SPASMODIC BEGINNING OF A GENERAL POLICY.

*Growth in Law: Child Labor Law of 1851.*—In the late forties the sentiment in favor of restricting the employment of children appears to have reached important strength,[1] and to have urged an extension of the policy to all factory children. This was part of a general agitation for reform directed at several objects of complaint. In 1848 two petitions were presented to the legislature praying that the hours of employment for children be limited to eight a day and that employers be required to give them opportunity to obtain a common school education.[2] These contained, however, no demand for the entire prohibition of child employment below a minimum age. No attention was given to the petitions. In the following year four petitions with the same request were presented to the House.[3] The committee on judiciary, to which they were referred, reported a bill declaring ten hours to be a legal day's work in certain specified industries, prohibiting the employment of any "minor or adult" more than ten hours a day or sixty hours a week, and forbidding altogether the employ-

[1] See provision in the charter of the Mount Lucas Orphan and Guardian Institute in 1845, above, note 1, p. 8.

[2] *Minutes of House of Assembly,* 1848, p. 382. This request was coupled with one for a general ten hour day, which was agitated by the workmen of the time. The same was true for the petitions in the succeeding years noted below. The bills eventually introduced also provided both for a general limitation of hours and for a restriction upon child labor.

[3] *Min. House of Assem.,* 1849, pp. 279, 466, 483, 494.

ment of children under twelve years of age.[4] But before reaching a vote, it was postponed to the next legislature.[5]

In 1850 petitions to the number of three were again sent to the House[6] and the bill of 1849 was introduced anew.[7] But disagreement between the House and Senate prevented its passage.[8] Meanwhile the reform movement was gathering headway. The state campaign in the fall of 1850 was hotly contested on the issues of that agitation, of which the demands of the workingmen were a part.[9] The outcome was a narrow victory for the Democrats, who advocated the reforms[10] The legislature of 1851 accordingly carried through the program, in which was a bill restricting the employment of children.[11]

[4] House Bill 128, 1849.

[5] *Min. House of Assem.*, 1849, pp. 1003-4. The vote on postponement was 33 to 20.

[6] *Min. House of Assem.*, 1850, pp. 100, 131, 414.

[7] House Bill 23, 1850.

[8] The House passed the measure promptly after some amendment. (*Min. House of Assem.*, p. 505.) But the Senate, with other amendments, struck out the prohibition of the employment of children below the minimum age. That took the heart out of the bill and the House refused to concur. The Senate postponed further consideration until the next year. *Min. House of Assem.*, pp. 611-12; *Senate Journal*, p. 382.

[9] See files of the *Trenton Daily True American*. The issue of November 5, 1850, contains a statement *seriatim* of the issues at stake.

[10] *Trenton Daily True American*, Nov. 16, 1850.

[11] The message of the new Governor, George F. Fort, was full of suggestions for correcting evils complained of at the time. Monopolies, the election instead of the appointment of the judiciary, land speculation and engrossment, property qualifications for the franchise, as well as labor legislation, were some of the subjects discussed. On these he advocated reform measures which he thought would "rectify many antiquated wrongs, restore to the people those rights and privileges of which they had been long deprived, ameliorate their condition in all the relations of life, impart a new and salutary impetus to the progressive tendencies of the age, equalize the burdens as well as the advantages of govern-

The bill of 1851[12] was the same as those introduced in preceding years, except that it abandoned the compulsory ten hour day for adults. As enacted, the provisions pertaining to children were amended in their application so as to include children in "any factory."[13] As to these it forbade that any minor should "be admitted as a worker" under ten years of age and limited the hours for all minors in factories to ten a day and sixty a week. To enforce the law it provided a fine of $50 for each offence, "to be sued for and recovered in an action of debt, in the name of the overseer of the poor," for the benefit of the minor.[14] The following year an attempt was made to define the indefinite thing called a factory by declaring it to be "any building in which labor is employed to fabricate goods, wares, or utensils."[15]

This enactment was quite inadequate for its object. The age limit was probably too low to affect any import-

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ment, elevate the character and moral power of the state, and give peace and concord to our glorius union."

Concerning child labor, he said, "Infant laborers in factories should also be protected from such excessive exactions as are calculated to destroy their physical and mental capacity for health and usefulness." Then referring to the consequences of child labor in England, he added, "It is our duty to guard against the occurrence of such evils within our jurisdiction." (*Message,* pp. 10 and 11.)

The *Trenton Daily True American* of May 15, 1851, had the following eulogy of the legislature of 1851. "You have removed the ancient landmarks of feudalism. No longer will your children be compelled to run riot in ignorance on account of your poverty. No longer will the merciless creditor deprive you of the power to pay demands and rob your family of the very means of obtaining a subsistence. No longer will your capacity to sit upon a jury be measured by the value of your property."

[12] House Bill 84, 1851.

[13] The original application was only to cotton, woolen, silk, paper, glass and flax factories.

[14] *Pub. Laws,* 1851, p. 322.

[15] *Ibid.,* 1852, p. 63.

ant number of children. It is doubtful if, with a full enforcement, it would have seriously altered the practice. Moreover, the wording of the prohibiting clause permitted easy evasion. No provision whatever was made for determining accurately the age of any child which was brought in question. The age for the restriction of hours—twenty-one years—was unenforceably high for that day. And more than all, the provision for enforcement was totally weak. No one in particular was charged with bringing prosecutions or seeing that they were brought. Violation of the act was not made a misdemeanor or crime, so that prosecution might be brought by the ordinary prosecuting officers. The only officer mentioned with the enforcement was the overseer of the poor, in whose name the fine was to be sued for. But even he was not required to bring suit, although possibly it was understood that he would do so. It is not surprising that, of a measure of such limited pretensions and more limited potency, it should be recorded that no opposition appeared in the legislature.[16] Yet it made one achievement. It committed the state for the first time to the policy of controlling the employment of children under their modern relations of employment.

It remains only to say that this imperfect act continued until 1883 the only formal declaration of the state on the employment of children. The only change was one in 1876 which made the restriction on hours more enforceable, though to no result, by altering its application to those children only who were under sixteen years old.[17]

*Compulsory Attendance Law of 1874.*—With the strengthening of an interest and ability to provide for

[16] Trenton correspondent of the *Newark Advertiser,* Mar. 13, 1851. Quoted in *Rept. of Bureau of Statistics,* 1885, p. 264, footnote.

[17] *Pub. Laws,* 1876, p. 306.

the future of children, there came naturally an agitation for coercive state action in their education. Considerations of school efficiency, as well as regard for the child, induced the school officials to lead in urging this proposal.[18] After the public schools were made uniformly free in 1871, the economic excuse of parents for keeping their children out of school was so far weakened that the resistance to the proposal was diminished.[19] Out of this agitation came the act of 1874.[20] This required every child between the ages of eight and thirteen years to attend some public or private school at least twelve weeks every year, six weeks at least to be consecutive, or to be instructed at home at least twelve weeks in the various branches taught in the public schools. Exemption was made of those physically or mentally unfit and also, by a proviso to the penalty clause, of those cases in which the parent was "unable, by reason of extreme poverty, to comply with the requirements of the law."

*Observance and Results: The Child Labor Law.*—The act of 1851 never had any force. It even appears to have been forgotten. At any rate, the school officials through-

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[18] See *Reports of State Superintendent of Public Instruction.*

[19] In his report for 1871 the state superintendent took cognizance of the agitation and went so far as to say that the time would undoubtedly come when such a law would be demanded; that, having provided by taxation for free schools, he deemed it due to the taxpayers that, by further enactment, a full attendance of children should be secured during the school term. (P. 18.) The proposal received attention in 1872 in the message of Governor Randolph, who, however, opposed any compulsory law as conferring upon the state a power which "will almost inevitably precede the more inquisitorial guardianship, and more dangerous encroachments, as regards individual affairs." He thought it necessary to "bear for the time the deprivations and losses ever incident to the popularization of never so good a cause." *Messages and Official Papers,* p. 225.

[20] *Pub. Laws,* 1874, p. 135.

out the state, though complaining frequently of the employment of children as a reason for non-attendance at school, never refer to that law.[21] Whether forgotten or not, its age limit was too low to have any important effect on the employment of children. A more significant comment on the observance of the law was that of Governor Joel Parker who, in his inaugural address in 1872, said there was reason to believe that the act of 1851 was often disregarded. He recommended a legislative investigation into the conditions of child labor.[22] Other testimony collected is as indefinite as this and is less trustworthy. On the whole, it testifies to a conviction, on the part of those in a position to observe, that there was a very noticeable amount of employment of young children, but conveys only scanty information on the lower ages of child employees and indicates nothing at all as to whether the number under the age limit of ten years was noticeable.

Continuous and comparable statistics upon the number of children employed throughout the period of the act of 1851 do not exist. But some figures are at hand for the silk industry, which had a marvelous growth during the decade 1870 to 1880.[23] The data are from such different sources that the figures in the second column are not all comparable with each other and not at all comparable with those in the first column. But they point to a marked increase in the number of children employed, although the indefinite age group signified by "youth" and "children" destroys any significance for the observance of the law. Yet, from the data for this one industry, the inference is plausible that a large number

[21] See *Rept. State Supt. Pub. Instr.*

[22] *Inaugural Address*, 1872, p. 12.

[23] See Twelfth Census, *Manufactures*, Pt. II, p. 543.

## TABLE I.

CHILDREN IN SILK INDUSTRY.[1]

| | "Youth"[2] | | "Children" | |
|---|---|---|---|---|
| | Number | Per cent[3] | Number | Per cent[3] |
| 1870 | 1386 | 20 | .... | .. |
| 1874 | .... | .. | 1428[4] | 26 |
| 1875 | 4535 | 25 | 2130[4] | 25 |
| 1879 | .... | .. | 3763[5] | 28 |
| 1880 | 5550 | 17 | .... | .. |
| 1881 | .... | .. | 3489[6] | 25 |

[1] Arranged from data in *Repts. Bur. of Stat.*
[2] *Rept. Bur of Stat.,* 1881, p. 151. Source unnamed.
[3] Computed by writer.
[4] For year ending Dec. 21, quoted in *Rept. Bur. Stat.* 1879, p. 106. Source unnamed.
[5] Returns from 106 establishments, *Ibid.*, 1880, p. 82. The report for 1879 printed (p. 106) returns from 55 employers, showing 3648 "children" comprising 35 per cent of all employees. But the later figure is more comprehensive.
[6] Returns from 105 establishments, *Ibid.*, 1881, p. 143-145.

of young children, even if over ten years, must have been employed, and evidence for the close of the period supports the inference.[24]

The figures for the censuses of 1870 and 1880 show the following increase in the number of children employed under 16 years of age.[25] This shows that the number of such children employed increased nearly 100 per cent in the decade, although the general increase in the wage earners employed in manufacturing kept the increase in the proportion of children down to 17 per cent.

## TABLE II.

CHILDREN UNDER SIXTEEN

1870-1880.

| | Number | Per cent of Total Employees |
|---|---|---|
| 1870 | 6,239 | 8.2 |
| 1880 | 12,157 | 9.6 |

[24] See below page 23 *et seq.*
[25] Twelfth Census, *Mfrs.,* Vol. II, p. 540.

*The Compulsory Attendance Law.*—A side light on the employment of children is thrown from the statistics of school attendance.[26] The following figures, compiled from

[26] Such statistics have significance partly because the employment of children is one important reason for the non-attendance of children at school. It was later found at Trenton that about half of those withdrawing from school did so to go to work. (See below, p. 181). But this line of argument may not be followed too closely, for there are other causes of non-attendance and irregular attendance besides employment. The value of such a side light is further lessened by the fact that the law under consideration applied only to factory employment. So that a child might be out of school for any one of several employments,—as many were in agriculture,—and still not violate the law. Yet school attendance is significant in this matter for another reason independent of these qualifications. A community which fails to keep its children in school during their early years displays an indifference to the future of the children or a present necessity, either of which puts them early to work, and that too in a factory as well as in other occupations. The conditions as to school attendance during the period thus become of sufficient interest to note briefly.

The most desirable data would be those for the percentage of enrollment of all children in the population, under the age limit for employment. Those are not available. Such figures are furnished for the whole population within the school age, seven to eighteen years. But the figures are dependent on the returns of the school census, which is too unreliable to bear usage for this purpose. The state school tax was apportioned among the counties according to the assessed valuation of property, while the funds when raised were distributed according to the census of school children in the county. The motive to pad the census returns was irresistible. Then also the appointment of enumerators was made by local officials and their work was subject to no central supervision until well into the next period. Between incompetent enumerators, unorganized methods, and an inducement to local padding, the returns are too suspicious to be significant for the present purpose. For the whole effect upon enrollment due to changes in the employment of children, or due to better enforcement of attendance, might be multiplied or even more than negatived in the percentages of enrollment by errors from those sources. The reports of the State Superintendent of Public Instruction contain discussions of this inacccuracy showing improbable variations in the returns amounting to as much as 12 per cent. *Report for 1885,* p. 18. See also 1875, App., p. 17; 1892, p. 4; 1895, App., p. 17.

the annual reports of the State Superintendent of Public Instruction, show the percentage which the average daily attendance was of the total enrollment in the public schools in eleven cities of the state. The data are too incomplete and uncertain to permit an average for all the cities, so they are given, such as they are, for each city. The large influence of other factors, besides the

TABLE III.

PERCENTAGE OF AVERAGE DAILY ATTENDANCE OF TOTAL ENROLLMENT.[27]

| Year | Bayonne | Elizabeth | Hoboken | Jersey City | Newark | New Brunswick | Paterson | Trenton | Camden | Bridgeton | Millville |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1857 | .... | 45.5 | 72.0 | 27.6 | 37.2 | .... | 52.9 | 49.4 | 44.0 | 85.2 | .... |
| 1858 | .... | 44.6 | 49.5 | 35.9 | 42.9 | .... | .... | 49.4 | 43.2 | 90.0 | 36.2 |
| 1859 | .... | 56.5 | 47.5 | 35.5 | 46.7 | .... | 56.7 | 63.4 | 48.6 | 64.3 | 36.1 |
| 1860 | .... | .... | .... | .... | .... | .... | .... | .... | .... | .... | .... |
| 1861 | 45.2 | 55.4 | 50.0 | 41.5 | 49.0 | 51.8 | 47.0 | 56.6 | 55.6 | 54.7 | 40.1 |
| 1862 | 47.7 | 55.5 | 50.8 | 39.1 | 55.6 | 49.6 | 53.0 | 73.2 | .... | 61.4 | 44.3 |
| 1863 | 49.8 | 57.5 | 41.6 | 37.0 | 49.8 | .... | 60.0 | 85.8 | 60.5 | 68.4 | 47.2 |
| 1864 | .... | 43.9 | 37.4 | 38.0 | 49.8 | 50.7 | 61.3 | .... | .... | .... | 48.2 |
| 1865 | .... | .... | .... | .... | .... | .... | .... | .... | .... | .... | .... |
| 1866 | .... | .... | .... | .... | .... | .... | .... | .... | .... | .... | .... |
| 1867 | .... | .... | .... | .... | .... | .... | .... | .... | .... | .... | .... |
| 1868 | 51.4 | 50.8 | 46.5 | 41.4 | .... | 60.9 | 79.3 | .... | .... | 61.2 | .... |
| 1869 | 42.4 | 51.5 | 45.0 | 41.3 | 58.1 | 58.3 | 56.6 | 80.4 | 67.3 | 66.9 | 53.0 |
| 1870 | 48.7 | 42.4 | 50 3 | 45.1 | 57.7 | 58.8 | 57.1 | 59.6 | 64.2 | 58.6 | 40.9 |

Next in desirability to the percentages of enrollment are the percentages of attendance. An improvement in the regularity of attendance would be cognate with a lessening of employment of young children, though the amount of the former can indicate nothing as to the amount of the latter.

[27] Compiled, under direction of the writer, from the annual reports of the State Superintendent of Public Instruction.

employment of the children, upon the regularity or intermittency of attendance at school, forbids any close reasoning on such data as this. In the present case, the prohibition is the more complete because of suspicious variations in the percentages from year to year. But it unquestionably indicates a situation with reference to provision for the future of children in which the employment of young children would be rife.

The agitation and passage of the compulsory attendance law of 1874 tended to improve these conditions. But circumstances combined to reduce the effectiveness of that measure. In the first place, it was inherently weak. The exemption from the penalty on account of poverty, however justifiable it may have appeared, took the force out of the act for most of those with whom the purpose of the law was concerned. And besides this, it was not made the duty of any specific person to see that the law was observed.[28]

In addition to its inherent weakness, three considerations in its operation tended to its neglect. Most of those compelled to attend would do so only for the prescribed time of twelve weeks. This would result in such a coming and going of pupils that the work of instruction would be seriously impaired. Again, the enforcement of the law would cause an influx of unwilling and incorrigible pupils who could be cared for only by special provisions, which most communities were unwilling or unable to furnish.[29] That these were not complained of more fre-

[28] This defect was noted by the Superintendent of Public Instruction in his discussion of the law. See *Rept.* 1874, p. 17.

[29] In 1872, when the compulsory law was being agitated and before it was passed, the superintendent of schools for New Brunswick said it would be necessary, before passing a compulsory law, to permit or require cities and towns to establish an ungraded reformatory school for truants and incorrigibles. *Rept. Supt. Pub. Instr.* 1872, App. p. 7-8.

quently was probably due to the fact that no pretense was made at enforcing the law. Finally, the rock on which it was actually wrecked was the unwillingness or inability of local boards to provide the additional accommodations for the additional pupils. Most of the larger towns and cities were already behindhand in providing for those children who were willing to attend. To enforce the attendance of those still unschooled would have involved a bonding and taxing which many communities would not and some could not stand. Complaints of this difficulty became increasingly frequent.[30] The sentiment in favor of compulsory attendance was not yet strong enough to induce people to pay the cost.

Yet in spite of these strongly deterrent influences, there seems to have been some improvement with the passage of the law. The following table gives the total enrollment, the average daily attendance, and the percentage of the latter upon the former for twelve of the principal manufacturing centers of the state.

It will be seen that each of the first five years has a percentage of attendance close to that of the average for them all; that from 1876 the yearly percentage shows a marked rise and remains close to the average for the remaining five years. This rise of average attendance between the two periods of nearly five points followed the enactment of the law after one year, during which

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During the year 1874-1875, it was attempted to meet this want for Newark in the establishment of the Newark City Home at Verona, about eight miles north of Newark. But the Superintendent at the time said that it afforded only about half the needed accommodations. (*Rept. Supt. Pub. Instr.* 1875, App., p. 14.) This school has since been developed as an important part of the present model provision by Newark for the enforcement of the compulsory attendance law.

[30] See *Message of Gov. Parker,* 1875, p. 7; also *Repts. Supt. Pub. Instr.*

TABLE IV.

PERCENTAGE OF DAILY ATTENDANCE OF ENROLLMENT 1871-1880.[31]

| Year | Total Enrollm't | Ave. Daily Attend'ce | Per Cent | Year | Total Enrollm't | Ave. Daily Attend'ce | Per Cent |
|---|---|---|---|---|---|---|---|
| 1871 | 55,876 | 31,771 | 56.8 | 1876 | 69,884 | 41,250 | 59.0 |
| 1872 | 60,093 | 32,376 | 54.9 | 1877 | 71,681 | 42,592 | 59.4 |
| 1873 | 60,699 | 32,281 | 53.3 | 1878 | 74,164 | 45,069 | 60.8 |
| 1874 | 65,203 | 37,235 | 56.2 | 1879 | 75,732 | 45,471 | 60.1 |
| 1875 | 67,357 | 36,982 | 54.9 | 1880 | 77,783 | 47,045 | 60.5 |
| For 5 yrs. | 309,228 | 170,648 | 55.3 | For 5 yrs. | 369,244 | 221,427 | 60.0 |

there was a fall of 1.3 points. On the whole the law would seem to have had some effect upon the regularity of attendance.

*Conditions at the End of the Period.*—How little effective during this period had been the policy of the state in behalf of its children may be seen in the conditions at the time of the agitation and passage of the law of 1883. First as to the number of child workers. The Bureau of Statistics of Labor and Industry made in 1880 a fairly comprehensive inquiry into the manufactures of the state. The returns from 734 establishments showed 10,002 "children" employed, who comprised 17.3 per cent of all the employees in those establishments.[32] The United States census of manufactures for the same year showed 12,152 children under sixteen years, comprising 9.6 per cent of all employees.[33] The difference between these is due probably in chief part to the fact that the Bureau of Statistics returns were only from the larger factory estab-

[31] Compiled, under the direction of the writer, from data in the reports of the Superintendent of Public Instruction.

[32] Compiled from tables, pp. 73 to 155.

[33] Twelfth Census, Vol. II, *Manufactures*, p. 540.

lishments, while the census included all the smaller enterprises, in which the possibilities of business organization do not permit as many children to be used as in the larger establishments.

These figures show that a large number of children were employed, but indicate nothing as to the lower ages of the children, or as to whether the law was observed or not. The Bureau of Statistics for several years printed returns from employees bearing on these points, but the number reporting was too limited and the figures are otherwise under suspicion. The most comprehensive and probable are those in the report of 1880.[34] Employees from 137 different establishments reported 4871 children between ten and fifteen years employed where they were and 476 children under ten years of age. Comments from wage earners in the report of 1881[35] contain frequent assertions that children seven, eight, and nine years old were at work. These figures are not safe within even a considerable margin of their exact amount. But it may be safely concluded from them that a considerable number of children under age were employed.[36]

Some further light on the lower ages of child workers is obtained from an investigation of factory children in 1884. The act of 1883 provided for a factory inspector. In the discharge of his duties during 1884, he made a

[34] Pages 34-36.

[35] Pages 97-100.

[36] The absence of any indication as to how the ages of the children reported were known to the employees reporting them admits the possibility that the statements were made merely on the appearance of the children, a basis which is unreliable at best, and exceedingly treacherous when used by those inclined to overstate the facts. This is strengthened by the frequency of round numbers in fives and tens among the returns. But, on the other hand, the fellow-employees of the children are best situated of all persons for making an estimate without positive evidence for each one.

careful inquiry into the condition of child employees. He found[38] that the average age at which they had gone to work was nine years. As a rule they had been sent to school to about their sixth or seventh year and had been taken out two years later to work. Almost all the children at the time they were examined by the inspector said they were between twelve and fifteen years old. But it should be considered that the act of 1883 had raised the age limit for boys to twelve and for girls to fourteen and that many actually under those ages would claim to be of the new minimum age. Against this claim is the testimony of the children showing that the average age at which they began work was nine years. It is highly improbable that during the three to six years since these children had begun to work,—from age nine to age twelve or fifteen,—the accretions to the force of child workers from the youngest ages had so far and so suddenly diminished that only a negligible fraction of those then employed were under the legal minimum.

As to the hours of employment for children, the reports of the Bureau of Statistics show that the ten hour day, or even less, had become nearly universal as the scheduled working day. But a great deal of overtime was worked, so that practically the hours were longer. This overtime affected the children as well as the older employees. Of the 137 establishments reported by employees in 1880, only eleven were working regularly more than ten hours a day.[39] But 43 of the 137 were reported as working children overtime more or less. Similar returns from employees in 1881[40] included statements of the

[38] *Rept. Insp. Fact.* 1884, pp. 14-19.

[39] Almost all of these ran eleven hours. Only nine were reported as regularly running more than 60 hours a week. Two of these ran 62 hours, two 64 hours, four 66 hours, and one 72 hours.

[40] *Rept. Bur. Stat.* 1881, pp. 8-9.

average number of hours worked during busy seasons. The averages for the following child employing industries were reported thus: cotton mills, 11 1-4 hours; silk mills, 10 1-5; woolen mills, 10 11-13. The report says that the hours were longest in those industries where women and children were largely employed.[41] In his investigation of 1884, the factory inspector found that all the children questioned had been accustomed to work ten hours a day, and many of them thirteen hours and over through overtime. Fourteen hours was in some cases the time worked, the excuse being that the extra time was allowed off their Saturday labor.

The illiteracy of the child employees as reported by the inspector corresponded to the other facts. In 1883 he wrote "many of them had never been inside of a school room . . . Not a few of these were unable to give the name of the state in which their places of residence were located."[42] From his investigation of 1884 he concluded "Not 2 per cent know anything about grammar or have ever been taught any . . . The vast majority could not spell words of more than one syllable, and very many could not spell at all. About 10 per cent could answer questions in simple multiplication. Of the remaining 90 per cent, the majority could not add up the smallest numbers. At least 90 per cent know absolutely nothing about simple geographical and historical questions. The number able to read and write, in a distinguishable way, was shockingly small, and very many could neither read nor write even their own names. Very few of these children, the majority of whom were born in the United States, ever heard of George Washington. Over 95 per cent never heard of the Revolutionary War, Abraham

[41] *Rept. Bur. Stat.*, 1881, p. 6.
[42] *Rept. Insp. Fact.*, 1883, p. 9.

Lincoln, the Civil War, Governor Abbett,[43] or President Arthur. At least 60 per cent never heard of the United States or Europe. At least 30 per cent could not name the city in which they lived, and quite a number only knew the name of the street where they were housed. Many who had heard of the United States could not say where they were . . . Ninety-five per cent could answer no question about other states or cities of the United States."[44]

Illuminating testimony to the ineffectiveness of the law is given in the report of the inspector for 1884.[45] In response to circular letters sent to employers notifying them of the laws, new and old, placed under his jurisdiction for enforcement, he found that in nearly all cases the replies expressed "an utter ignorance about the ten hour and other acts . . . Some of these laws have been on our statute book for years . . . and yet few had any knowledge of them and their observance was the exception."

The evidence reviewed with regard to the results of the policy during this period does not offer a very definite measure of the success. Yet these conclusions may be stated. There was a very considerable increase in the number of children employed in manufacturing. This was part of the industrial development of the state and the rise of manufacturing cities. It would appear also that the employment of very young children increased greatly in numbers, and probably proportionately, although no statement concerning the latter can be made

[43] Then Governor of New Jersey.

[44] *Rept. Insp. Fact.*, 1884, pp. 17-18. The allegations in this respect were questioned. To this the inspector replied in his next report that the facts were, as a matter of truth, even worse than reported. *Rept.* 1885, p. 9.

[45] Page 10.

with certainty. The number of children employed under ten years cannot be stated, but the evidence is ample to show that the law of 1851 had no effect in restricting such employment. There was some improvement in the school attendance, but not enough to indicate any effect on child employment.

The period as a whole does not reveal much approach toward a definite policy. The sentiment in behalf of restricting child employment was neither intense enough nor constant enough to swing the power of the state steadily toward a consistent course in the matter. The act of 1851 was passed on a wave of reform which subsided before the more compelling interests of the war and the industrial development that followed. In these events the law was all but forgotten. The course of child employment was left to the free play of economic influences alone. When the sentiment against it was revived toward the end of the seventies, the advocates of restriction had to build up from the ground, except for the foundations in the precedent which had recognized the principle of a policy of restriction.

A Settled Policy: The Standard.

# CHAPTER IV.

## LIMITED AND UNINFORMED PUBLIC SENTIMENT

## 1883 TO 1904.

*The Child Labor Law of 1883.*—With the close of the seventies there began to appear an agitation for a more vigorous policy toward child employment. This found its leaders among those of the wage earners who became active at that time both for organization and for legislation on their own behalf. One of the earliest fruits of the labor agitation was the establishment of the Bureau of Statistics of Labor and Industry in 1878. From the first, the chief of this bureau gave sympathetic attention to the demands of the wage earners and attempted to conduct investigations into the facts bearing on their proposals. Part of this attention was given to child labor. The early reports are full of fragmentary data, discussions of the evils of child employment, and pleadings for effective legislation.

The agitation soon appeared in the legislature. In 1880 a bill was introduced into the House of Assembly to raise the age limit to twelve years and to strengthen the enforcement of the act of 1851.[1] This received some consid-

[1] House Bill 146. This would have been ineffective. It merely substituted the word "twelve" for the word "ten" in the earlier law, leaving unchanged the loose phraseology of the prohibiting clause. To strengthen the enforcement, it made the overseers of the poor,—in whose name prosecutions were to be brought,—subject to a penalty of $25 for failure to prosecute cases when called to their attention.

eration in the House, but it never reached a vote. The interest of the public at large does not seem to have been very great. At least no mention of the bill, or of any public discussion of it, could be found in either of two leading newspapers of the day. In 1881 the same bill was introduced again.[2] This time it passed the House, but was never reported from committee in the Senate.[3] It assumed enough importance this time to win bare notice, but no comment, from the newspapers. When the legislature met in 1882 a new and much more thorough bill was introduced.[4] The most distinctive feature was the provision, though an imperfect one, for an inspector of factories. The details in which its provisions were framed would probably have proved very ineffective. Yet, when compared with anything that had been offered, the bill shows a much more thorough understanding of the administrative problem involved. And, besides, it took very advanced ground on the matter of hours for women and minors. The bill passed the House easily,[5] but was so

This penalty was to be recoverable in an action of debt. But no particular person was charged with bringing such action. It was left to "any citizen", whose only inducement to trouble himself about the matter, aside from any interest he might have in seeing the law observed, was half the penalty recovered.

[2] House Bill 235.

[3] *Min. House of Assem.*, 1881, p. 729.

[4] House Bill 184. This provided for a twelve year age limit which was to apply to mercantile employments as well as to those of manufacturing and mining. The employment of children between the ages of twelve and fifteen was to be conditioned upon their having attended school for at least twenty consecutive weeks during the twelve months preceding employment, and upon their furnishing their employers with certificates from their teachers designed to witness to such attendance. The hours for minors under twenty-one years and for adult women was limited, in the employments prescribed, to ten hours a day and sixty a week. Penalties were provided for both employers and parents who violated the act.

[5] *Min. House of Assem.*, 1882.

amended in the Senate[6] that the House could not concur and abandoned the measure.[7]

It is deserving of notice that even this was a gain for the agitation over the existing law. It raised the age limit to twelve years. It recognized the device, though in a crude form, of documentary evidence that the minimum age and other conditions of employment are complied with. And even in the matter of enforcement, the county superintendents might reasonably be expected to show more energy than the overseers of the poor, although they would fall far short of a uniform and thorough administration of the law. Possibly it was the expectation of such an outcome that induced the opponents of the bill to concede the other features. But in any case the concessions were now a matter of record to serve as precedents for further agitation.

These details are of interest as showing the progress in the agitation for a more effective child labor law. The impotent measure of 1880 did not have support enough to get through the House. In 1881 it had strength to pass the House, but promptly succumbed in the Senate. By 1882 a measure which its friends hoped and its opponents feared would be much more effective than its predecessors, not only passed the House with scarcely any opposition, but commanded the time of the Senate on several occasions, and survived the opposition there in a form which expressed a measurable advance over the effective aspirations of either the existing law or the preceding bills. Yet another year was required before

[6] *Senate Journal,* 1882, pp. 879, 931.

[7] *Min. House of Assem.,* 1882, p. 1001. The friends of the bill regarded the amendments as fatal, especially in putting the enforcement in the hands of the county superintendents of schools, instead of with a factory inspector, as provided in the House. See *Newark Daily Advertiser,* Mar. 28, 1882.

the pressure of the agitation was sufficient to put through what was thought to be a workable law.

When the legislature met in 1883, interest in the proposed legislation had grown much. The *Newark Daily Advertiser* said editorially that the prospects for an act were "excellent"; that the arguments for it were "innumerable and of great force and only extreme selfishness has prevented an enactment long ago."[8] The same paper, a year later, said it was a "pressure of public opinion" that secured the passage of the act.[9] The progress of the bill was noted in the newspapers, at least one of which showed sympathetic interest and reported the debates upon it in some detail.[9a] The greater interest is further indicated by the fact that both branches of the legislature had child labor bills before them. Yet the leaders of this interest, the men who stirred things up and lobbied for the measure, appear to have been the labor leaders of the day.

The bill introduced into the House[10] was less radical than the amended bill turned out by the Senate the preceding year. It embodied one idea, however, of administrative value. It required employers to keep a certificate of age, signed by some member of the local school board, for every child under sixteen years old. Such a certificate, merely, would have been of only partial effect. But the feature of an employer's register for all children within a prescribed zone above the minimum age has, in its later forms, been an effective aid to the enforcement of the law. This bill passed the House without amendment.[11]

[8] Jan. 11, 1883.

[9] Mar. 5, 1884.

[9a] *Newark Daily Advertiser.*

[10] House Bill 18.

[11] *Min. House of Assem.*, 1883, p. 260.

In the Senate it was put off repeatedly and then indefinitely,[12] being supplanted by the Senate's own bill.

The Senate bill[13] underwent several lengthy and heated debates, resulting in some important amendments, but finally passed[14] and was quickly put through the House without further change.[15] This law[16] applied only to mining and manufacturing, although the original bill included mercantile employments also. It fixed a minimum age limit of twelve years for boys and fourteen for girls, in spite of efforts to reduce the age to twelve for both. For children between these minima and fifteen years, it prescribed twelve[17] consecutive weeks of attendance at some public or approved private day or night school, provided, where necessary in the case of orphans, the guardian might get from the inspector a permit for employment without such attendance. Those children were required to bring to their employers from their teachers certificates of such attendance. The enforceability of the age limit, however, was completely destroyed as against deceitful parents and willing employers by a proviso added to the section on penalties that "a certificate of the age of the minor, made by him or her and by his or her parent or guardian at the time of employment, shall be conclusive evidence of the age of such minor upon any trial for the violation of this act." On the matter of hours, the original provision fixed the limit for all minors and for women at not over ten a day or sixty a week. It was then attempted to remove all restriction except for minors under sixteen years. Then

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[12] *Senate Journal*, 1883, p. 648.
[13] Senate Bill 64.
[14] *Senate Journal*, 1883, p. 362.
[15] *Min. House of Assem.*, 1883, pp. 555-6.
[16] *Pub. Laws*, 1883, pp. 59-61.
[17] The original provision was for twenty weeks.

the whole matter was stricken from the bill, but was later returned and, as finally enacted, limited hours for children under fourteen to "an average" of ten a day or sixty a week. One inspector was provided for, as in the bill of 1882. But, unlike that bill, his appointment by the Governor was made subject to approval by the Senate, his salary was fixed at $1200 instead of $1000, and the limit to his expenses was placed at $500 instead of $300. This provision for inspection was at one time supplanted by an amendment giving the enforcement to the county superintendents. The clause providing an inspector was said to be the only part objected to in the final bill.[18]

The discussion brought out the usual arguments for and against such a proposal. The strength of its defenders lay in the argument from the experience of England, which was frequently cited by general reference. But no specific or accurate data were given on the condition of child labor in New Jersey, nor was a detailed analysis of the effects of child labor in England shown as evidence of the need of preventive legislation. Sentiment, justified by experience but uninformed on the reasons for its justification, and the growing political importance of organized labor, were the most convincing arguments in behalf of the bill. The opponents similarly had little in point to offer. The necessities of the widow and orphan were the strongest argument they presented. The arguments from the experience of England were unanswered except to say that "they did not apply to conditions in New Jersey." But what the difference in conditions was and why the lessons from England did not apply, it was not attempted to make plain. The most conspicuous objection was that the measure would cripple industry. That

[18] *Newark Daily Advertiser*, Feb. 14, 1883.

it would do that in the least degree was held conclusive as against the claims of its advocates.

This act was the utmost that New Jersey could do after four years of agitation. To many of that day it appeared to be a great achievement. Senator Stainsby, the leading defender of the bill before the Senate, thought it was one of the most important bills ever brought before the legislature.[19] The *Newark Daily Advertiser* reported that it was believed that the bill was "strong and sweeping", and that it would "have the effect of stopping the employment of mere infants in shops."[20] According to the chief of the Bureau of Statistics, the law, "although far from satisfactory, was regarded as one of the most momentous measures of labor legislation yet effected in this state."[21] It was, indeed, a measurable advance over the previous conditions. But its ambitions far exceeded the adequacy of its provisions for attaining them. It was the resultant of the large aspirations and small practical wisdom of the agitators on the one hand, and the small sentiment and large legislative shrewdness of the opponents of the policy on the other. It failed in almost all the points necessary for an effective policy. This will be discussed later. But it was an initial attempt that furnished experience which guided the sentiment of the state when that was ready for another endeavor to carry out its policy with effect.

In the act of 1883 and in the supplementary legislation there will be observed an attempt to establish three different minimum requirements to be met by children before their employment would be permitted. These were a minimum age, a minimum attendance at school, and a

[19] *Newark Daily Journal*, Feb. 14, 1883.

[20] Feb. 27, 1883.

[21] *Rept. Bur. Stat.* 1885, p. 265.

minimum physical state. The provisions in the act of 1883 and the attempts to improve upon them will be noted for each of these minimum standards in order.

*Minimum Age Limit*—By the act of 1883 the legal minimum age was raised from the uniform limit of ten years, prescribed in the law of 1851, to a dual limit of twelve for boys and fourteen for girls, where it remained for two decades. This score of years, however, was not without agitation for a still higher age limit. The chief inspector, in his annual reports, urged an increase in the permissive age.[22] These recommendations were approved, though somewhat perfunctorily, in the messages of two of the governors.[23] And even employers are quoted as favoring a higher age.[24] But this agitation did not gain sufficient strength to embody its object in the statutes. On the contrary, the department charged with maintaining the established age limit came, during the last five years of the century, into such inefficient hands and under such demoralizing political influences that it is doubtful if there was in fact any restriction worth the name on the employment of children in factories.[25] This breakdown in the administration of the law provoked a number of attempts to secure remedial legislation. Most of these aimed at a strengthening of the administration of the law. But one measure, introduced at the request of the Federation of Trades and Labor Unions in 1899[26] and designed to strengthen

[22] The act of 1888, p. 7, urges raising age for boys to fourteen; that of 1891, p. 7, urges thirteen years for boys; and that of 1892, p. 8, urges fourteen again.

[23] *Message of Gov. Green*, 1889, p. 29; *Message of Gov. Abbett*, 1893, p. 49.

[24] *Rept. Insp. Fact.*, 1894, p. 21.

[25] See below, p. 177 *et seq.*

[26] House Bill 223. *Proceedings Convention F. T. and L. U.*, 1899, p. 41.

the whole law, deserves notice in this connection for its clause making the age limit fourteen years for boys as well as girls. This bill was held in committee until the day before adjournment, when it passed the House[27] but too late to get before the Senate.

This lapse in the administration of the child labor law eventually aroused, among people theretofore apathetic, a sentiment which gained force from the agitation in other states. The demand was at first for a stricter enforcement of the existing statute. But it soon directed itself toward a higher age limit also, and finally, when the general discussion revealed administrative weakness in the law as it was, it demanded a complete overhauling of the legislation on the subject. This movement will require greater attention at a later point in the discussion. It is to be noted here merely that because of this agitation the age limit for boys was raised in 1903 from twelve years to be uniform with that of girls at fourteen years.[28]

The provisions for a mimimum age limit in the act of 1883 were defective in several respects. From the point of view of administration, enforceability was greatly weakened by the looseness of the phraseology of the prohibiting clause, which provided merely that no child as described "shall be employed in any factory", etc. The inspector immediately met with evasions by employers who declared that children found in their factories were not in their employ.[29] It was impracticable for the inspector to prove in court that they were, although he was morally sure of it. Others were found who were engaged and paid on a sub-contract system by employees of the establishment and not by the proprie-

[27] *Min. House of Assem.*, 1899, p. 491.
[28] *Pub. Laws*, 1903, p. 386.

tor.[29] The law's penalties upon "employers" did not reach such sub-employers as these. Finally, the force of the penalties was entirely dissipated by the proviso which made the certificates of age from the parents conclusive as to the age in any prosecution. These were not made under oath and many of them were clearly false and were so considered in many cases, even by the employers.[29] But the framing of the law left the burden of proving the deception upon the inspector, who was at an obviously great disadvantage as against the parent's allegation, especially when the child was foreign born. In this situation, employers needed merely to provide themselves with a certificate, regardless of the true age of the child. This is what they all did, some openly declaring that so long as it protected them they would not question its accuracy.[29] It is not surprising that, when the law had been in operation but a few months, the inspector complained, "It is hardly possible to obtain a conviction before the courts so long as the . . . law permits the certificate of the parent or guardian to be conclusive evidence of a child's age."[30]

This exemption of the employer is not without defense. It is a fair question how far, if at all, the responsibility for determining the true age of a child should be placed upon the employer. It not only adds to the other cares of his business a difficult and troublesome duty, but it also subjects him to liability through the mistakes and deceptions of parents and others to whom he must go for evidence. It would cause the best intentioned employers to be penalized at times. Administrative considerations require that the employer be compelled, through some device, to use care. But they

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[29] *Rept. Insp. Fact.*, 1884, pp. 22-3.

[30] *Ibid.*, 1883, p. 6.

do not necessarily demand that the whole responsibility be put upon him. The law of 1883, however, was at fault in relieving the employer too much. But experience soon showed that it was more imperfect in the character of the evidence of age which it accepted.

In the hope of meeting this defect in the law, the inspector, in his first report, recommended that certificates of age be required from the registry of births, and that in the absence of those, the parents' declarations be supported by their affidavits.[31] This, with other suggestions of the inspector, was laid before the legislature by the Governor in his message.[32] When the legislature met, the legislative committee of the Federation of Trades and Labor Unions had a bill introduced into the Senate[33] embodying some of the inspector's recommendations. By section four, which remained unchanged in the final act,[34] parents were required to furnish the inspector on demand a certificate from the office of registration of births, or, in the want of that, an affidavit of the age of the child. False swearing, "knowingly" done, was subjected to penalty as perjury. These affidavits were made conclusive as to the age of a child in any prosecution of an employer. Also the method of prosecution was changed from that of criminal procedure to that of an action for debt in which the penalty was sued for by the inspector.

These amendments were of doubtful value. The new procedure for prosecution was an improvement, but its greater simplicity and expeditiousness could avail little when no violation could be proved. The reliable official

[31] *Rept. Insp. Fact.*, p. 10.

[32] *Annual Message Gov. Ludlow*, 1884, p. 21.

[33] Senate Bill 2, 1884. *Rept. Insp. Fact.*, 1884, p. 6.

[34] Act of April 17, 1884. *Pub. Laws*, pp. 200-202.

certificates of birth were authorized by the law but not required as a condition of employment. Of course they were not used, since the parent's affidavit, which could be made to suit the case, was accepted by the law. Parents would swear to false affidavits and employers did not care if they did, since the affidavit *per se* protected them. The parents could not be reached, for the crime of perjury is one of the most difficult to prove in any case; and here this difficulty was aggravated by that of proving a child's age to be other than that alleged by his parents. Besides, there was often nothing against which a judgment could be executed if granted. Probably the law in this form did restrain some who would otherwise have disregarded it.[35] But in general it was weak.[36] No further changes in this matter, and none at all in the others noted, were made in the law until the whole code was remodeled in 1904. For a full score of years the policy of the state lost in effectiveness because of the internal defects in the law noted above.[37]

[35] *Rept. Insp. Fact.*, 1884, p. 20.

[36] *Ibid.* Also reports for 1885, p. 28; 1901, p. 229; 1903, p. 4, "False affidavits are the root of the evil."

[37] There was some unsuccessful agitation for amendment, however. The bill which became the general factory act of 1885 had a provision by which all persons found in any part of a factory at other times than meal hours should be deemed to be employees for the purposes of the act. (Senate Bill 154, 1885, Sec. 24.) This would have prevented employers from evading responsibility by denying that a child in question was an employee of theirs. It was stricken out, however. It was again before the legislature in 1886 in a bill supplementing the general factory act of 1885 just mentioned. But this bill failed to pass. (House Bill 218, 1886, Sec. 12.)

Concerning the administrative needs for a better determination of the age of children, the inspector urged in his report for 1894 the "necessity" for an employer's register of all children under sixteen years in his employ. (P. 29.) But no attention was paid to this. A bill introduced in 1899 at the instance of the labor organ-

*Minimum School Attendance.*—The second minimum requirement as a condition for employment was a prescribed amount of schooling. Section 2 of the act of 1883 aimed to secure this to every factory child, from the minimum age for employment up to fifteen years.[38] By a provision in identical terms, a section of the compulsory attendance law of 1885 sought to secure this schooling to such children employed "in any business whatever."[39] These enactments remained unchanged throughout the period.

This legislation for a minimum amount of schooling may be attacked as too meagre for the interest of the children on whose behalf it was made a part of the state's policy. But aside from that it was forceless for the measure of that interest actually sought. Practical conditions hindered the child from leaving work to attend day school. In the first place the employer did not like it. It increased the changes among his child employees and thus interfered with the organization of his force. Then the teachers did not like it. It interfered with the organization of their work. Such pupils would seldom fall in well at the stage which the group had reached. And special attention to fit them in appeared lost when they left at the expiration of the prescribed time. More

izations, in addition to raising the age limit to fourteen years as noted above, required employers to obtain from all children between fourteen and sixteeen years, a certificate, signed by parent or guardian and the principal of the school last attended, giving the name, residence, and age of the child. This would have added to the statement by the parents to the employer the record of the child's age as given to the school officers. That would have been a helpful check upon false statement of age and would have afforded the valuable administrative device of an employer's file of documentary evidence for every child within a prescribed limit above the minimum age.

[38] See above, page 33.

[39] Act of April 20, 1885, Sec. 2. *Pub. Laws,* 1885, p. 281.

than this was the effect on discipline. Such children usually come from their period of work with an increased spirit of "freshness" and independence which aggravates the task of keeping them in line during their unwilling attendance. Finally, many children do not like it. Those who are sent or allowed to go to work early, include many who are sent or permitted to go because they do not like to go to school.[40] For these reasons it was the night school rather than the day school that was attended in order to comply with the law. But night schools were not generally provided. Of those that were, many were managed perfunctorily and attended in the same spirit simply to meet the letter of the statute. Then, attendance at night school was not at all equivalent to attendance at day school, although the law accepted it as such. The night session is shorter than the day session and is less profitable hour for hour because of the physical exhaustion of the day's work on the child under fifteen, and because attendance is much more irregular. These defects quickly appeared to the early inspectors and were repeatedly pointed out.[41] They

[40] In an investigation by the Bureau of Statistics in 1903 into the conditions of nearly a thousand factory children, each was asked whether he preferred to go to school. The answers of those under fifteen are tabulated below.

| Age | Total | Preferred School | | Per cent of Total | |
|---|---|---|---|---|---|
| | | Yes | No | /. | No |
| 12 | 5 | 0 | 5 | 0 | 100 |
| 13 | 21 | 3 | 18 | 14 | 86 |
| 14 | 183 | 23 | 160 | 13 | 87 |
| All Ages | 209 | 26 | 183 | 13 | 87 |

[41] The Inspector of Factories in his report for 1888, p. 7, discusses these points in part. He found this section so difficult to enforce

also offered suggestions to remedy the matter.[42]

This criticism and agitation brought no results, however, until 1903. In that year the wave of popular feeling in behalf of a stronger protective policy for children raised both the minimum age limit[43] and the compulsory school age[44] to fourteen years, and thereby cut off two of the three years from twelve to fifteen during which the prescribed minimum of school attendance was required. For the remaining year it was abandoned.[45]

*Minimum Physical Condition.*—The third minimum

that the law was "nearly, if not quite, a dead letter." The night schools, in his opinion, did not accomplish the object aimed at. He thought "the half time system for all children up to fifteen would be a better educational provision." (*Rept.* 1887, p. 9.) For other criticisms, see reports for 1897, p. 11; 1902, pp. 14, 238. One deputy inspector complained that the law compelled children who had already been in the higher classes of the schools and who wished to work, to attend night school for three months each year. *Rept. Insp. Fact.*, 1890, p. 73.

[42] *Report* for 1888, p. 7, recommends that the educational restriction be abolished and that the age limit be made fourteen for both boys and girls. In 1891, p. 64, a deputy inspector recommended a nine hour day for children under fifteen in order to enable them to go to night school. In his report for 1897, p. 12, the inspector recommended that in communities where employment of children ceases in the summer time, as in the glass industry, summer day schools be opened for the children employed during the rest of the year.

[43] See above, p. 37.

[44] Act of October 19, 1903, sec. 153, *Pub. Laws*, p. 59.

[45] As an index of the earlier intention of the legislature in this matter, it ought to be noted that in a general revision of the school law in 1900, the period of required attendance for employed children was increased to "at least sixteen weeks, in two terms of eight consecutive weeks each." But a "week" at night school was reduced from five to four evenings. This act of revision was declared unconstitutional but on grounds not affecting the matter here involved. It was replaced by a similar act in 1902. This act in turn being found unconstitutional, the general law of October 1903 was passed. This, as related in the text, raised the compulsory age to fourteen and, with the increase in the minimum age limit earlier in the year, disposed of the matter.

condition for employment takes account of the fact that a child may have reached a prescribed age and attained a prescribed education and yet, because of imperfect physical development, still need to be witheld from labor in order to insure a sufficient physique for later years or prevent cruel suffering for the present. To this end, an act of 1884, enlarging the staff of inspectors, contained a provision empowering the inspectors to demand "a certificate of physical fitness" from a physician in the case of children apparently unable to work and to forbid the employment of a child who could not obtain such a certificate.[46] The maintenance of such a minimum is a hard matter at best because of the difficulty of prescribing a minimum physical standard that will apply to all cases. But this law left the minimum degree of "physical fitness" entirely undefined and then left each parent to select his own physician to make the definition in the case of his child. This could not but result in wide irregularity if observed. And it would not be observed except in extreme cases, for parents would consult their family physician or some other who would be moved to decide as the parents wished.

*Hours for Children: Laws of 1883 and 1885.*—Besides prescribing minimum conditions which must be complied with before a child may become employed at all, the state has also attempted to regulate matters affecting those children, still minors, whom it permits to be employed. Such are the hours of labor and matters affecting health and safety. Reference is not here made to general laws applying to all employees, but to those special enactments springing from a solicitude for the future interests of growing children. The legislation on hours will be first considered.

[46] *Pub. Laws,* 1884, p. 201, sec. 3.

It will be recollected that when the act of 1883 first came before the legislature, like the bill of 1882, it established a ten hour day and a sixty hour week in all employments for all minors under twenty-one. It could not be enacted, however, until the age had been reduced to fourteen and the scope of employments to manufacturing. Further, it substituted an "average" of ten hours a day for a flat ten hour limit and excepted fruit canning establishments.[47] This was a retreat from the position declared in the defunct existing law, in which the age limit for hours was sixteen years. The agitators could not let it rest there. The inspector himself recommended raising the age to eighteen.[48] Besides, the inspector found that the requirement of only an average of ten hours a day offered a loophole for the evasion of the sixty hour a week limit. Accordingly, in his report for 1884, he recommended a change in the law.[49] Governor Abbett, in his next message, supported the suggestion.[50] When the general factory act of 1885 was brought forward, it was again sought to raise the age to twenty-one and to include all employments. The legislature conceded the contention as to employments, but as to the age, it only returned that to sixteen. But it also restored the flat limit of ten hours a day or sixty a week.[51] This set a standard abreast of that of the day. But the force of the measure was weakened by the provision that it was "willful" violation that would incur the penalties.[52] The difficulty of proving a violation to be "willful" was one of the

[47] Secs. 3 and 4.
[48] *Rept. Insp. Fact.*, 1883, p. 11.
[49] *Ibid.*, 1884, p. 23.
[50] *Message Gov. Abbett*, 1885, p. 28.
[51] Sec. 7.
[52] Sec. 15.

reasons assigned by the inspector for difficulty encountered in enforcing the act. In his next report the inspector recommended that the word "willful" be stricken out.[53] Another difficulty was the unwillingness of children to testify against their employer.[54]

It thus appears that the ideal set up from the beginning by the advocates of a restriction on the hours for children was a ten hour day for all minors under twenty-one. The most recognition they could get, however, was a limitation at first for children under fourteen in 1883, and then for children under sixteen in 1885. Neither law made any restriction on night work for children above the legal age for employment at all. And it does not appear that this was asked.

*Efforts to Increase the Restrictions on Hours.*—The perseverance of organized labor of this period in its agitation for legislation desired by it is in no way better shown than in its continued urging of a ten hour limit for all minors under twenty-one and for women. The general factory act of 1885 as passed omitted several provisions in the original bill and changed some others. To restore these omissions and alterations, a supplementary bill was introduced into the legislature of 1886. This bill contained a section prohibiting the employment of minors or women in any "manufacturing, mercantile, or mechanical" establishment for more than ten hours a day or sixty hours a week.[55] The whole bill, however, failed to pass. Undiscouraged, the Federation of Trades and Labor Unions introduced into the next legislature a similar supplementary bill containing the same provision on the hours for minors and women.[56] The

[53] *Rept. Insp. Fact.*, 1885, p. 48.

[54] *Ibid.*, p. 28.

[55] House Bill 218, 1886, sec. 8.

[56] House Bill 85, 1887, sec. 7.

bill was passed after much amendment, but this section was stricken from the measure on enactment. The following year another supplementary bill was brought forward to supply those features still rejected, including the ten hour day for all minors and women. This time, however, it was to apply only to manufacturing and mechanical employments.[58] Again it was defeated. Every year thereafter until 1892 almost identically the same bill was introduced and as regularly defeated, although always, excepting in 1891, passing the House.[59]

*The Fifty-Five Hour Law of 1892.*—This agitation met success in 1892, when a most drastic law was passed regulating hours of employment. The preceding year a bill was introduced establishing fifty-five hours as a week's work, and fixing the hours for work during each day between seven A. M. and twelve M. in the forenoon and one P. M. and six P. M. in the afternoon, except on Saturday, when work was to cease at noon. This would appear to apply to adult men, though nothing in the bill specifically said so. It did declare that no minor under eighteen and no woman above that age should be employed except during the hours stated.[60] The bill passed the House with only one negative vote,[61] but was never reported from the Senate committee to which it was referred. In 1892 the same measure was introduced again,[62] and passed both branches of the legislature without a single vote recorded against it,[63] though in

[58] House Bill 93, 1888, sec. 2.

[59] House Bill 79, 1889; 119, 1890; 82, 1891.

[60] House Bill 40, 1891.

[61] The vote was 37 ayes to 1 nay in a body of 60 members. *Min. House of Assem.*, 1891, p. 702.

[62] House Bill 50, 1892.

[63] The vote in the House was ayes, 44; nays, none, in a body of 60 members; in the Senate, ayes 15, nays, none in a body of 20 members. *Min. House of Assem.*, p. 184; *Senate Journal*, p. 475.

the course of its journey it was greatly weakened and its constitutionality was endangered. Fruit canning establishments and glass factories were excepted from its operation. The provisions designed to secure its enforcement were emasculated. The requirement of tri-monthly visits by the inspectors was stricken out altogether. The "two weeks" limit was stricken from the requirement that the inspector investigate reported violations within two weeks, so that no time limit at all was put upon him, and the mandate that he "shall" prosecute violators was changed to the authorization that he "may" do so. In this form it became the act of March 23, 1892.[64]

This act was widely heralded and won for New Jersey a famous position with respect to this feature of labor legislation.[65] It established a ten hour day and a fifty-five hour week and no night work for all minors under eighteen years and for all women over that age. Possibly it meant to do that for all men also, though the language on that is not above debate. And this it did, in fixing the hours of the working day, in terms that did not admit of any subterfuge. Yet it is open to serious criticism, partly as to its implied policy and its administrative qualities, but especially as to constitutionality. It is doubtful if those who had withstood the agitation for so many years would have conceded so much as to policy unless they had felt sure that the law was constitutionally and administratively impotent. These criticisms bear chiefly on its application to adult men and women. Yet the consequent weakness of the law was equally fatal to its influence upon the hours for minors. An attempt to test the constitutional strength

[64] *Pub. Laws*, 1892, pp. 171-2.

[65] See *N. J. Rev. Char. and Cor.*, I, p. 134.

of the act was made at once in two cases which were carried through to the highest court of the state. After two years of litigation, the court decided the cases on grounds of errors in procedure and left the constitutional question unsettled.[66] In the meanwhile the chief factory inspector had become convinced that there were some industries in which the act could be observed, if at all, only with unjustifiable losses. Also his term expired before the litigation was decided, although he held office until 1896 because a Democratic governor and a Republican senate could not agree on his successor. Under these circumstances, he appears to have given up the attempt to secure a ruling on the law or to enforce it except by moral pressure. His successor, when appointed, was a politician who lacked sufficient interest in the measure to push it, even though it had been a perfect law. For the rest of this period this statute remained intact on the books but measurably discredited in the public view. The uncertainty whether the act of 1885 was actually replaced by this one or not left the state's policy toward the hours of employment for children undefined and hazy, until the law of 1904, with which the next period is concerned. The unsuccessful bill of 1899, already twice noted, had a section that would have cleared the matter. It provided for an eight hour day and a forty-eight hour week for all children under sixteen years, while they were fulfilling the required attendance of twelve weeks at school. At other times the hours were limited to ten a day and sixty a week.

*Health and Safety of Children.*—Legislation in behalf of the health and safety of factory workers in general operates in the interest of children as well as adults.

[66] See *Rept. Insp. Fact.*, 1893, pp. 93-133b. The cases were not reported in the regular volume of law reports.

But a special interest in the ungrown child has led to some special provisions for his protection. It is these which are noted in this section.

Neither the early child labor bills nor the acts of 1883 and 1884 contained any restriction on the employment of children at dangerous or unhealthful work. In his report for 1883, the factory inspector marked this omission and urged that this, with other matters, be remedied by the legislature.[67] His next report also took note of the matter with some earnestness.[68] The subject was given attention in the bill enacted in 1885, which forbade that any woman or minor under eighteen years "be required" to clean machinery while it was in motion.[69] But the legislature rejected a provision forbidding that any minor be employed at "any work dangerous to health without the knowledge of the factory inspector and a certificate of fitness from a reputable physician."[70] The inspector thought the provision for safety now made would be ineffective because few would risk their employment by testifying that they had been "required" to clean moving machinery. He recommended that the law specifically prohibit them from doing so.[71] This was done in 1887 and at the same time protection from unhealthful occupations was attempted. The law then declared that "no minor or woman" shall clean moving machinery and "no minor below the age of sixteen shall be employed at any work dangerous to

[67] *Rept. Insp. Fact.*, 1883, p. 11.

[68] *Ibid.*, 1884, p. 15. "The work at which some of these children are engaged is in many cases dangerous to life and limb and suited only for persons of mature years. This is proven by countless mutilated hands and by numerous accidents."

[69] *Pub. Laws*, 1885, pp. 212-15, sec. 4.

[70] House Biil 154, 1885, sec. 15.

[71] *Rept. Insp. Fact.*, 1885, p. 30.

health without a certificate of fitness from a reputable physician."[72] This continued to be the law throughout this period. But notice should be made of a bill in the Senate in 1897 proposing to substitute the word "injurious" for "dangerous" and to remove the exception allowed under a physician's certificate.[73] The bill never came to a vote, however.

A bill of 1888[74] required employers, before employing any minor under eighteen years of age, to instruct and inform him "in the nature and character" of the machinery "in and about which" he was to be employed. This passed the House, but was reported adversely in the Senate, which thereupon laid it aside. The effect of this would have been merely to give statutory form to the common law as already laid down by the courts of the state.[75] But that would have been a gain.

An act of 1889, providing for fire escapes and other protection from fire, contained a clause forbidding that women or "children" be employed in any establishment, manufacturing or mercantile, "in a room above the second story from which room there is only one way of egress."[76] The act was indefinite as to the age within which a minor would be considered a child within the meaning of the law.

The special provisions during this period for protecting the health and safety of children thus appear very incomplete. The only definite feature of the law was that on cleaning moving machinery. Many other dangerous operations were left out of consideration and the

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[72] *Pub. Laws,* 1887, pp. 243-6, secs. 3 and 7.

[73] Senate Bill 200, 1897.

[74] House Bill 255, 1888.

[75] For a statement of the common law, see *Smith vs. Irwin,* N. J. Law Reports (22 Vroom) pp. 508-9.

[76] *Pub. Laws,* 1889, pp. 446-51, sec. 1.

prohibition of employment at work dangerous to health was too indefinite, too susceptible to undecided controversy in application to be of any force. Whatever virtue it might have had was further weakened by the exception allowed under physician's certificate.

*Compulsory Attendance: Law of 1885.*—The practical operation of laws restricting the employment of children is affected so closely by efforts, or the absence of them, to compel the attendance at school of the children who are forbidden to work, that a discussion of a child labor policy must include the attitude toward compulsory attendance. The efforts to enforce the child labor law of 1883 directed attention at once to the need of supplementary legislation requiring the children excluded from employment to improve their time in school.[77] A bill was introduced into the Senate in 1884 providing for the compulsory attendance of all children between the ages of seven and twelve years for at least twenty weeks each year.[78] But the urging of the measure was checked by the fear of moving too rapidly,[79] and it was

[77] The inspector of factories, in his first report, recorded that the sentiment for such law was "universal", and recommended it in his report. (*Report,* 1883, pp. 5, 10.) The superintendent of schools at Paterson wished for such a law. (*Rept. Supt. Pub. Instr.,* 1883, App., p. 35.) The incoming governor gave a blanket recognition to this and other recommendations of the inspector and urged them upon the legislature for its "serious consideration." *Inaug. Address Gov. Abbett,* 1884, p. 18.

[78] Senate Bill 88.

[79] It was ordered printed before reference to a committee and left open for a while to allow thorough consideration. *Newark Daily Advertiser,* Jan. 29, 1884.

In an editorial dealing with some matters before the legislature, the *Newark Daily Advertiser* said, "It is a very important and well-intended measure, but the details should be thoroughly understood and wisely formulated before it is passed. It virtually transfers the control of children from their parents to the school boards, and unless it gives the former the right to educate their children in

withdrawn four weeks later because it was thought best, on account of the lack of school accommodations, to leave the consideration of the problem to the next legislature.[80]

Meanwhile, the friends of the proposal did not cease to urge it.[81] In 1885 the bill of 1884 was again introduced into the Senate with a few additional details, and passed without amendment and with hardly any opposition or discussion.[82] It required every child between seven and twelve years old to attend a day school for at least twenty weeks each year, at least eight of the twenty to be consecutive.[83] It also required, as noted in another connection, that every working child under fifteen years of age, employed "in any business whatever", should attend some recognized day or night school for at least twelve consecutive weeks within every twelve months. Two weeks at a recognized half-time or evening school was to be counted as one week in day school. This attendance was to be evidenced by a certificate from the teacher, without which the child might not be em-

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schools of their own choosing, the bill will be open to objections that may defeat the object intended on constitutional grounds." Jan. 30, 1884.

[80] *Rept. Insp. Fact.* 1885, p. 6. Superintendent of schools for Paterson, in *Rept. Supt. Pub. Instr.*, 1884, Appendix, p. 30.

[81] The inspector again urged it in his report (1884, p. 31) and the Governor called "special attention" to that feature of it. *Message Gov. Abbett,* 1885, p. 28.

[82] Act April 20, 1885, *Pub. Laws,* pp. 280-4. The newspapers hardly noted the progress through the legislature.

[83] The constitutional objection to such requirement was met by excepting the case of any child which was excused by the school board of the district on the ground of its "bodily or mental condition," or because it was "taught in a private school or at home by some qualified person or persons in such branches as are usually taught in primary schools."

ployed. When no efficient school existed within two miles from the child's place of employment or his home, the law accepted attendance at a school temporarily approved by the factory inspector. This admitted the employers' evening schools maintained in some places. Parents who failed to send their children to school as provided were subject to a small fine or short imprisonment. For the enforcement of the law, the factory inspector or the school authorities were empowered to secure a detail from the police force of cities to be known and serve as truant officers. In the absence of a regular police force, the local school board was required to designate one or more constables or, where none resided in the district, some other person. It was made the duty of the truant officer to cause or bring prosecution against any person violating the act. An attempt was made to meet the problem of persistent truants and incorrigibles by providing that all such children between seven and fifteen years of age should be deemed "juvenile disorderly persons" who, if over nine years old, might be sentenced to a juvenile reformatory until sixteen years old, unless sooner discharged. But the sentence might be suspended during regular attendance at school. The problem of providing accommodations, which delayed the act one year, seems not to have been solved, for by a proviso the law was not to apply to those communities where the accommodations were inadequate. Since that was the chronic condition, especially in the larger towns and cities, the proviso practically defeated the object of the bill in the very places where it was most needed.

*Defects of the Attendance Law.*—This law was not effective. Just what effect it had will be discussed at a later point. But here it is desired to note the respects in

which the law itself failed to meet the exigencies which are bound to arise in any attempt to carry out the policy adopted. In the first place the shortness of the term of required attendance, whatever may be said of it as a matter of policy, was an administrative weakness. It is a comparatively simple matter to note whether a child is attending school or not. But to note for each child whether he has attended for eight consecutive weeks and whether he has attended more than that, either regularly or intermittently, sufficient to aggregate twenty weeks in all each year would require an amount of bookkeeping that would tend to dissuade school officials from trying to keep up with it. But such records would be necessary to know whether children enrolled were fulfilling the required attendance.

More serious than this was the inadequate provision for getting children on the rolls in the first place, as well as keeping them there. That could be done only through truant or attendance officers. It was soon discovered that, in providing for these, the act failed to authorize their payment except in cities.[84] Also, truant officers were not empowered to enter places of employment in search of children illegally out of school. This omission was especially fatal to the enforcement of the attendance for twelve weeks required of all working children under fifteen years of age. As the factory inspectors had authority to enter only manufacturing establishments, there was no person with sufficient powers to discover whether such children employed elsewhere than in factories were complying with the law. Further, as to truant officers, they had to be selected from the regular police force or the constables if there were

[84] *Messages Gov. Abbett*, 1887, p. 14; 1891, p. 29; *Rept. Supt. Pub. Instr.*, 1891, p. 21, complain of this.

such. But the average policeman looks upon truancy service with disdain and the heads of the force regard it as an irrelevant duty to be discharged with as little attention as possible. The administration of the truancy work through these channels and under these conditions, therefore, could not but be ineffectively done.

Another weakness in the provision for enforcement was that the administration of the law was left to local school boards without any penalties or other provision for constraining them to secure its observance. Although this weakness was inevitable, since no scheme of centralized administration with authority over localities would have been possible of enactment, nevertheless it has to be noted. For the want of such constraint, local boards yielded in their efforts at enforcement before various deterrent consideration. One immediate obstacle was the expense of providing for truant officers and of conducting prosecutions.[85] Another consideration was the impairment of classroom work and discipline.[86] This has been shown in connection with the requirement of school attendance as a condition of employment. The only remedy for this was to provide ungraded rooms and parental schools with special teachers and equipment for backward, irregular, and incorrigible children. But this involved additional expense, which was prohibitive except for the larger places, and a special problem to worry the school authorities. The easier way was to let the law go by the board. Finally, there was the perpetual lack of school accommodations. Later it will appear how important this actually was. But here let it be noted that the law made no provision for insuring build-

[85] *Rept. Insp. Fact.*, 1886, p. 17, complains of this.

[86] *Ibid.*, 1886, p. 17; 1887, p. 9; Supt. of Passaic, in *Rept. Supt. Pub. Instr.*, 1896, p. 203, complain of this.

ings into which the children out of school might be placed if compelled to attend.

*Efforts to Strengthen the Attendance Law.*—The need of remedies for the deficiences of the law was soon noted by the advocates of compulsory attendance. Many urged merely a more vigorous law, but some advocated it through constraint upon the localities.[87] Attention was given to specific needs also, as for truancy or parental schools[88] and for accommodations.[89] The only defect, however, which received the attention of the legislature was the want of provision for insuring sufficient accommodations. This provoked a great deal of discussion. As soon as the act of 1885 went into effect, there arose at once a demand for constraint upon local school boards.[90] But a mandate by the state would not alone be sufficient. The inactivity of localities was not due solely to indifference or to refusal to incur the expense. There were many cases where funds could

[87] The Superintendent of Public Instruction at once took a pronounced stand for that course. In his report for 1885 he says that if, through negligence of municipalities, the present law fails "to provide for the maintenance and support of a thorough and efficient system of free public schools for the instruction of all the children of the state of school age, it is surely the constitutional duty of the legislature to enact a law which cannot fail." (P. 33.) The superintendent of schools for Newark complained of the law's weakness in this respect. (*Rept. Supt. Pub. Instr.*, 1886, App., pp. 101-2.) Governor Green in his message of 1890 urged the need of better enforcement. (*Message*, p. 27.) Likewise the superintendent of Paterson in 1899, (*Rept. Supt. Pub. Instr.*, 1899, p. 291) and the State Charities Aid Association in 1900 (*Annual Report*, p. 12).

[88] *Rept. Insp. Fact.*, 1885, p. 36; 1886, p. 17; *Rept. Supt. Pub. Instr.*, 1896, p. 203.

[89] The Inspector of Factories even urged that the state provide the needed accommodations. *Repts.* 1884, p. 31; 1885, p. 49.

[90] *Repts. Insp: Fact.*, 1886, p. 16; 1887, p. 9; 1889, p. 6; and Governor Abbett, in his message of 1887, p. 15, urged that the state school officials be given power to apply to the courts for a mandamus to compel neglectful localities to provide needed accommodations.

not be raised because the limit of taxation or of indebtedness had been reached. An attempt at compulsion which did not provide for these cases would have placed such communities between the devil and the deep sea. Accordingly practical discussion turned toward this problem. Before the law had been in operation two years, a definite proposal was made. Since 1872 school districts had been permitted to borrow from the state school fund for building purposes on school district bonds. But, by the framing of this law, cities found themselves shut out from this privilege.[91] Governor Abbett recommended in 1887 that provision be made whereby municipalities could borrow at a low rate of interest from this fund, of which some over $2,000,000 could be invested in this way. He urged also that all restrictions by their charters or by public law on their indebtedness be waived so far as to permit cities to provide needed buildings in this way.[92] The suggestion was followed. But carelessness in drafting the law delayed its enactment in passable form until 1889.[93]

[91] *Pub. Laws,* 1872, pp. 91-92. This authorized the investment of the state school funds in the building bonds of school districts and municipalities under prescribed safeguards. It then authorized the inhabitants of any school district, when met in a town meeting for the consideration of school finances, by a two-thirds vote of those present, to provide for the issue of bonds of the district in such sums and in such amounts and payable at such times as they might direct. Interest was fixed at 7 per cent and the bonds were made a lien upon the property of the district. There would seem to be no limit to the construction of school buildings by those who wished them except the amount of school funds to be invested in this way. Rural districts largely availed themselves of this opportunity. But in the case of cities, besides the impracticability of gathering the voters in "town meeting", there was the further obstacle that cities were integral districts in themselves and hence were restrained by their debt limits as municipalties from borrowng as districts.

[92] *Message Gov. Abbett,* 1887, pp. 14-15.

[93] *Pub. Laws,* 1889, pp. 353-5. The act was passed in 1887, but in

*Summary.*—The legislation just reviewed shows the beginning of a persistent and studied policy. In that it stands in marked contrast with the preceding years. Yet the sentiment of the state was limited in the extent of its support and was ignorant of the technique of a child labor policy. It did not see at how many different points such a policy comes into opposition to established practices, not only economic but social. Consequently, it did not make the numerous administrative provisions, each requiring due regard for the others, needed to meet these reacting influences. This knowledge was doubtless had by some in a much larger measure. But the perception of the various points at which opposition or evasion would be encountered and the perception, especially, of the administrative importance of providing for those occasions had yet to be hammered out by experience for the most of those who were shaping the policy from the side of its advocates. It is not implied that the opponents of the policy had any more thorough understanding of the matter. They did not need it. They each knew just how the provisions of the proposed law would affect their interests and were able to turn aside the force of the law at that point. The advocates of the policy were not always sufficiently sensitive to the fundamental consequences of such modifications of the law; so that, when the measure was tried out in

such a form as to make it doubtful whether it applied to a district coextensive with a city and independent of a township. Governor Green, who followed Governor Abbett, therefore vetoed it and brought the matter to the attention of the next legislature. (*Message Gov. Green,* 1888, p. 13.) The correction was made and the act passed and signed. (*Pub. Laws,* 1888, pp. 288-90.) This time it was so uncertain as to the security of the bonds issued under it as to jeopardize their sale. Governor Green called this point to the attention of the legislature in his message of 1889. (P. 19.) It was then passed in final form.

operation, the aggregate of such modifications was found to have left important loopholes. The defects of the policy are thus not to be charged to the farseeing and comprehensive counter campaign of those who opposed it, although here too there were doubtless some who were shrewd enough to see with satisfaction the consequences of the pruning of the bills.

Hence the character of the legal definition of the standard that has just been shown. The attempt to maintain an age limit was frustrated by imperfect provision for determining the true age of a child and by practically exempting the employer from responsibility for children under age found in his establishment, without locating the responsibility upon any other really responsible person. The educational minimum fell far short of the standard set because of various administrative contingencies unprovided for. The minimum physical standard was of no real force because the determination, according to the law, of a child's physical state easily fell into the hands of those with an indirect interest in having the child go to work anyway. The standard of hours for children became fatally uncertain. The exclusion from dangerous duties and occupations was so indefinitely ordered that only the most clearly dangerous cases would come with certainty under its application, without endless discussion of questions of opinion with no available resort to settle them. The compulsory attendance law was without adequate administrative force in many respects. And finally, as will be shown,[94] the public sentiment itself did not insist on an execution of the policy it had decreed.

When put into a consecutive statement, these shortcomings fill the view of the standard during the period.

[94] See below, chapter X.

But they should not be allowed to obscure the fact that the policy, even thus poorly defined, did have considerable force while in the hands of a sympathetic and willing department for enforcing it, and that success to an important degree was realized. Eventually the people of the state became aroused over the lack of complete success. The nature of the shortcomings in the law were learned through the experience within the state and elsewhere. And a new endeavor was made to define more effectively the standard of the policy. That is the subject of the next chapter.

# CHAPTER V.

## A GENERAL AND INFORMED PUBLIC SENTIMENT. SINCE 1904.

*The Widening Interest in Child Labor.*—Up to the opening of the present century, so far as the writer has been able to discover, the labor organizations offered the only organized effort for adopting and executing a state policy toward employed children. Soon after 1900, however, the agitation began to receive support from other sources. In 1901 the New Jersey Consumers' League was organized and, as part of its work, began the discussion of the child labor situation in New Jersey.[1] Child labor began to appear as a topic on the all-embracing program of the women's clubs. Charitable organizations also became infected. And the newspapers began to report discussions and publish complaints of violations of the law and of neglect of duty by inspectors and to urge reform.[2] Much that was said from

[1] It was under the auspices of this organization that the earliest attempts were made to bring into coöperation the various elements of the agitation.

[2] Special criticism was directed to the glass industry in the southern part of the state, the silk and other textiles of Passaic county, and the tobacco and cigar factories throughout the state. Examples of this are too numerous to cite. They will be found in all of the leading newspapers.

Two distressing events happening within a few months of each other had a great deal to do with increasing the interest of the state in the matter. In June 1901, Lawrence Cianchetta, after working all day and then through the night shift in a glass factory, was overcome with exhaustion on his way home along a railroad and fell

this time on was hastily concluded from insufficient and ill-considered observation. And much was even framed up for the purpose of sensation. So that a great deal of injustice, as well as truthful criticism, was brought upon some establishments in the state. But whether based, as in some cases, on deliberate sifting of the available facts, or, as in other cases, on hysteria, the swelling wave of sentiment adverse to the employment of children is the thing to be noted here. That was indisputable. And out of it came the events to be examined in this period.

*Agitation for Better Inspection.*—The public resolution now forming directed itself first to an improvement in the inspection service. It will be necessary, therefore, to turn aside here and follow that agitation in order to trace the public mind in its approach to a new ideal or standard. The labor organizations had

asleep on the track, where he was killed by a train which passed later. It developed at the inquest that he was but nine years old. The coroner's jury censured the glass company for employing one so young in violation of the law. (*Camden Post-Telegram,* June 15, 1901.) This was made the text for several editorials, also. The pathetic tragedy of such a little fellow losing his life as the result of exhaustion from toil gripped the sentiment of the state so as to strengthen greatly the militant opposition to child employment. The accident was often mentioned as the agitation grew.

Five months later almost to a day, in the same factory, James Mousto, while fighting with another boy, was thrown so as to injure his head. He was removed to an adjoining room where he died soon after the injury. At the inquest it was shown that this boy was only between ten and eleven years old. These proven cases of boys well under the age limit were proclaimed to be typical of conditions generally. The known negligence of the local inspector made it easy to believe that they were. The Union Trades Council of Millville, composed of some seventeen different unions, censured the chief inspector and the deputy; and a committee was appointed to arrange for a meeting of representatives of labor organizations from all parts of South Jersey to protest against the lax administration of the law. *Camden Post-Telegram,* November 14, 1901.

long agitated, though with no success and little attention, for a more specific and exacting legal requirement of duty from the inspectors. At length in 1902, under the added pressure of the growing sentiment, an act was passed requiring the inspectors to give their full time to their work.[3] Governor Murphy, who began his term that year, was in sympathy with the purpose if not with all of the methods of the agitation. He let it be known that he would hold the inspectors to this requirement. This brought improvement in some places at once.[4] The labor unions in some localities appointed committees to watch the work of the inspectors.[5] Numerous local organizations of a charitable and philanthropic character pursued the same policy. Although many complaints from these sources were without sufficient foundation and although many of them were not investigated, nevertheless this constant surveillance of the inspectors was an increasing stimulation to better service.

The efforts to reform the inspection were directed higher up also. The term of office of Chief Inspector Ward expired in 1901. Pursuant to a resolution of the annual convention in 1900,[6] the Federation of Trades and Labor Unions preferred charges against Inspector Ward and urged Governor Voorhees not to reappoint him. The Federation presented to the Governor a great number of affidavits alleging specific violations. But the Governor could not see his way to refuse reappointment to Mr. Ward.[7] When Governor Murphy had

[3] These events are discussed below, p. 138.

[4] Hugh F. Fox in *Annals of Amer. Acad.*, XX, 196.

[5] This was pursuant to action taken by the Federation of Trades and Labor Unions at its convention in August 1902. (See *Proceedings.*) Yet some locals had been doing this for some time.

[6] *Proceedings*, 1900, p. 40.

[7] The *Newark Sunday News* said this was due to "the exigencies

entered upon his term, charges were again preferred against Inspector Ward and his removal was demanded. This time the labor unions were supplemented by other organizations such as the Consumers' League and the State Charities Aid Association.[8] Governor Murphy, in a number of interviews with the inspector, urged upon him the "importance of prompt and vigorous action in case of infringement of the law."[9] On one of these occasions, April 22, 1902, the Governor censured him for neglect.[10] In August of the same year, the Federation of Trades and Labor Unions asked Mr. Ward to come before its convention and defend his course against charges there made against him in person.[11]

To all criticism Inspector Ward pleaded that he was thwarted by the falsified affidavits which could not be disproved. But even the most charitable of his critics, though admitting this point, still believed that he lacked aggressiveness and other qualities necessary to one in his office. Thus arose a demand for his removal. The Federation of Trades and Labor Unions sent a committee to Governor Murphy with that request.[12] The Governor received the committee, but had to tell them that, according to advice from the attorney-general, he had no power to remove the inspector, whose appointment was made with the consent of the Senate and whose removal, therefore, could be only by impeachment.[13] Counsel for the

of the political situation." January 3, 1904, in leading editorial at time of Ward's resignation.

[8] Hugh F. Fox in *Annals Amer. Acad.*, XXV.

[9] *Message Gov. Murphy*, 1903, p. 9.

[10] *Newark Evening News*, Apr. 23, 1902.

[11] *Proceedings*, 1902, p. 37. *Newark Evening News*, Aug. 19, 1902.

[12] *Proceedings*, 1902, p. 35. The committee could not find the Governor at the time, but was continued until it could. This it did on September 16, as noted below.

[13] *Daily State Gazette*, Sept. 17, 1902.

Federation concurred in the position of the Governor. The committee then considered that avenue as closed, because of the improbability of getting a verdict from the Senate.[14]

It was then proposed to amend the law so as to give the Governor power to remove the inspector. In this agitation the other forces joined with the labor organizations. Governor Murphy urged the proposal in his next message.[15] The outcome was an act giving the Governor this power,[16] though it was not secured without opposition that threatened to defeat the measure.[17]

When the Governor had the power of removal in his hands, however, he was slow to use it unjustly.[18] The heat of the accusations and denials distorted any view of the facts with reference to a course of strict justice.

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[14] The legislative committee of the Federation did, however, submit to the candidates for the Assembly the question of the action to be taken concerning the inspection.

[15] *Message Gov. Murphy,* 1903, p. 9.

[16] *Pub. Laws,* 1903, pp. 102-103. By this the appointment of the inspector was put in the hands of the Governor alone, who was given power to suspend or discharge him at his discretion, after giving him an opportunity to make a defense.

[17] *Proceedings Conv. Fed. T. and L. Unions,* 1903 (not paged).

[18] Many who were active in urging that this power be given to the Governor were surprised that he did not use it by removing Mr. Ward forthwith. It was thought that political influence was intimidating the Governor. While he doubtless could not disregard such influences, an independence and resolution later shown does not permit the easy acceptance of this view. Besides, it was reported that Mr. Ward tendered his resignation, which the Governor returned saying that he had no desire to remove him; all he wanted was that he make the office efficient and get the results the position was created to achieve. (For this see *Newark Evening News,* Jan. 2, 1904.) The facts fit better the interpretation which was afterward commonly given, that he wished to give Mr. Ward every opportunity to retrieve himself; that he hoped that this sword of Damocles would impel him to do better; and that meanwhile the Governor could make sure of his ground.

To what degree the law was violated and how far these violations were due to the unenforceability of the law as well as the lax efforts to administer it, were questions which, when asked in an unpartisan spirit, did not find their answers lying at hand. On the one hand were the accusations by the critics, charges which were often indefinite or without sufficient support to sustain a challenge of their accuracy. On the other hand were the unqualified denials of the inspectors. In this uncertainty Governor Murphy, soon after the legislature adjourned, without removing Mr. Ward, put his own private secretary, Mr. John L. Swayze, in active charge of the department to try out the situation. Mr. Swayze began in May the investigation of child labor which issued in the disclosures noted in the discussion of the observance of the law.[19] While this investigation was in progress a more vigorous enforcement of the law was undertaken also, especially after September 1, when there went into effect the act of 1903 raising the age limit for boys to fourteen, where it had been for girls from the beginning.[20]

The discussion about this time was considerably enlivened by the advance publication late in December of the first part of the report on child labor by the Bureau of Statistics already mentioned. The heated controversy

[19] See below, pp. 181 *et seq.*

[20] On September 22 an all day's conference was held by Messrs. Ward and Swayze with the deputies. The report of this conference states that by that date between 150 and 200 children had been discharged from the factories, while the department believed that many more had been laid off without notification. (*Newark Evening News*, Sept. 23, 1903.) The report of the inspector for the year ending October 31,—a report which was prepared by Mr. Swayze and Mr. Dale, the chief clerk of the department, although signed by Mr. Ward,—says that 327 children had been discharged since Sept. 1, to which as many more should be added who were discharged by the employers themselves or by truant officers or who were taken out by their parents. *Rept. Insp. Fact.*, 1903, p. 4.

over this report[21] does not require further attention than to note it as an event in the discussion over the agitation for a more vigorous policy. The data of the report are noted in their appropriate places.

On January 2, 1904, Mr. Ward resigned.[22] It was expected that Mr. Swayze would succeed him,—and the Governor would have appointed him,—but he was unwilling to accept the position at the salary attached. On January 8 Governor Murphy appointed Mr. Lewis T. Bryant, of Atlantic City, whose record, though pertaining in no way to factory affairs, promised well and whose administration of the office has been of a high character, though it has not escaped criticism.

*Agitation for a Better Law.*—Although the awakened

[21] This first part used the returns of the twelfth census for manufactures and, by comparison with the same returns for other states, concluded that the amount of child employment in New Jersey was not as deplorable as it was depicted. This conclusion was elaborated in the full report, published later, of the Bureau's own investigation of factory children. Besides this conclusion, the report argued for a much wider exemption of children employed because of family hardship. It made out that this was the chief reason why children went to work and urged the necessity of permitting children under the minimum age to take employment in those cases. The apparent tone of the advocate that sounded throughout the report struck a rasping discord with the agitation against child labor. It was attacked most venomously as a specious plea for child labor calculated to offset the agitation, as an indefensible attack on the department of inspection and especially on those then in charge of it, as a reflection on the legislature for passing the act of 1903. The chief of the bureau replied in a letter to Governor Murphy. See, *e. g., Passaic News,* quoted in *Newark Evening News*, Dec. 28, 1903; *Newark Evening News,* Dec. 26, 28, 29, 30, 31, 1903; Jan. 5, 28, Feb. 3, 1904; *Paterson Daily Press*, Feb. 2, 1904; *Trade Union Advocate*, Jan. 1, 1904. Similar statements of the controversy are found in other newspapers.

[22] The news reports and editorial notices commented upon it with evident gratification. It was stated that the resignation was asked for. See *Newark Evening News*, Jan. 2, 1904; *Newark Daily Advertiser*, Jan. 2, 1904.

public interest turned its attention first to strengthening the administration of the law, it soon began to agitate for a stronger law to administer. The imperfections of the existing law were more apparent now that it was more widely studied. Criticism was aimed especially at the reliance upon affidavits alone for evidence of a child's age. Inspector Ward had used this for his breastworks so often that his critics could not help but take note of what strength there was in the defense.[23] Hardly less emphasized was the demand for raising the age limit for boys from twelve to fourteen, where it was for girls. And Governor Murphy urged this upon the legislature.[24]

Three bills were introduced into the legislature of 1903,[25] of which one[26] was the best administrative measure. The content of this bill deserves notice as an index of the more informed attention to the administrative needs of the state's policy; and the legislative career of it is illustrative of the wider and more determined public interest in the matter. The bill established a uniform age limit of fourteen years. Children between that age and sixteen were required, before they might be employed, to secure from the local school superintendent, or an authorized agent, either of whom was made the sole judge in the matter, a certificate of age, issued only upon "satisfactory evidence", and stating also the child's schooling. Those whose certificates did not show an "ability to read at sight, and write legibly, simple

[23] The administrative weakness of the law has been considered above, p. 37.

[24] *Message Gov. Murphy*, 1903, pp. 9-10. "Children cannot be expected to go to school after the practical work of life has begun, and their mental, moral, and physical welfare all demand that the change recommended be made."

[25] Senate Bill 177; House Bills 2 and 88.

[26] House Bill 88.

sentences in the English language," were required to attend night school. Employers of children between fourteen and sixteen years were required to keep those certificates on file and to present them for examination to the inspectors and truant officers. The employment of a child under sixteen without such a certificate was subjected to a penalty of $50, and if continued after notice by the truant officer or inspector, to a further penalty of five to $20 for each day. This general scheme, with a number of buttressing details, was the first proposal in the legislature of an administratively adequate check upon children whom it was desired to keep from employment. It took the burden of proving the age of a child from the inspector and placed it upon the parent. It gave the inspector a simple and definite criterion of the legality of the employment of a child, namely, the presence of a certificate of age on file with the employer. It required the parent's word as to the age of a child to be supplemented by some "evidence." It protected the employer from liability if imposed upon by a parent or child, in that the certificate brought by the child from the school official was by implication authority for the employment. Any doubt on this point, in case of a false certificate, was removed by the specific provision that an affidavit from the parent, made at the time of employment, was to be conclusive in any charge against an employer. Yet this did not in this case open a loophole, because the employer must have the certificate also, under risk of penalty calculated to make him careful to secure it. This could be done only after the child had submitted evidence of his age to the school officer who issued the certificate. The measure was imperfect, however, in its reliance upon the judgment of the authority issuing the certificates as to what should be accepted as "satisfactory

evidence", for individual feeling, indifference, and carelessness would be bound to lessen the accuracy of this judgment in many cases. An extension also of the state policy was proposed in a clause forbidding children under ten years old to sell newspapers on the street at any time, and those from ten to fourteen to sell them between seven o'clock in the evening and seven o'clock in the morning, or during school hours in the daytime. Yet even this bill failed to provide several features urged by the agitators. Especially to be noted was the failure to prohibit night work for children and their employment in mercantile occupations.

Both of the House bills were referred to the committee on revision of laws. After extended hearings the committee reported what it called a substitute for both bills, but which was in fact the measure just noted so amended as to provide an age limit of sixteen years for girls while retaining the fourteen year limit for boys.[27] The bill was debated at length and amended in some details, but finally passed the House.[28] It met determined opposition, however, in Senator Shinn, the chairman of the senate committee to which it was referred.[29] The

[27] Committee substitute for House Bills 2 and 88. This change was made at the instance of the Federation of Trades and Labor Unions through its legislative committee [*Proceedings Conv. Fed. T. and L. Unions*, 1903 (not paged)], in the face of strenuous opposition from the manufacturers, especially in glass and silk. (*Newark Evening News*, Feb. 11, 1903; *Trade Union Advocate*, Mar. 20, 1903.) The only other change was the introduction of a clause specifically repealing the requirement of sixteen weeks of schooling for children between twelve and fifteen.

[28] *Min. House of Assem.*, pp. 525-6.

[29] The power of the chairman is almost absolute. The fetish of senatorial courtesy is so devoutly worshipped in the New Jersey legislature that it has been the height of discourtesy to suggest that a committee be relieved of further consideration of a bill; and for the Senate actually to recall a measure against the wish of the

most he would concede was to raise the age limit for boys to fourteen years. Accordingly, a bill to that effect, and also abolishing the requirement of school attendance for employed children between the minimum age and fifteen years, was quickly put through both houses and became the act of 1903 already noted.[30]

This sort of an anti-climax to the measure that passed the House was disappointing to the advocates of a stronger law. It was even questioned whether it would not have been better to have waited until the next year rather than accept the act that passed.[31] Yet their agitation was hardly lost. It is probable that the discussion and passage by the House of the relatively advanced measure which it produced prepared the way for the still stronger bill of 1904. At any rate, events moved favorably for the enactment of that law.

*The Bill of 1904.*—The agitation leading up to the legislative attempt of 1903 was continued with cumulative intensity. The Federation of Trades and Labor Unions endeavored to arouse the local organizations to activity

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committee chairman is unthinkable. Once in committee, a bill is at the mercy of the chairman, who knows no masters except the interests he represents and his party leaders. Thus has perished much proposed labor legislation, as well as other measures, without ever receiving the consideration of the legislators.

[30] See above, p. 37. The delay and opposition started a stream of petitions to the Senate lasting over a week urging the passage of the measure. *Senate Jour.*, pp. 417, 430, 455, 509, 528, 573.

[31] *N. J. Rev. Char. and Cor.*, II, 85. One thing contributing to the failure to secure a more comprehensive law was certainly the lack of agreement among the advocates of such legislation. It was reported that at the committee hearing while the bill was before the House "a score of delegates, and representatives from labor unions, and several deputy inspectors" appeared. All agreed that some improvement should be made in the present laws, although they did not agree as to what the changes should be. *Newark Evening News*, Feb. 11, 1903.

while its executive committee carried on a campaign to secure favorable consideration for a measure in the legislature of 1904.[32] The charitable and philanthropic societies became increasingly active.[33] The newspapers gave more space to reports and discussions and to editorial comment. Meanwhile, Mr. Swayze's experience as *de facto* head of the department of inspection, and the results of the investigation conducted under his direction, persuaded him that the child labor and inspection laws were administratively impotent, if not constitutionally weak.[34] At Governor Murphy's direction he began the preparation of a new law. But the possibility of getting a measure through the legislature was jeopardized by the lack of agreement, among those who were supporting the movement, as to the details of the law they wished enacted.[35] The prospects were that a number of bills would be introduced, representing the various ideals of the advocates,

[32] Pursuant to action taken by the 1903 convention of the Federation of Trades and Labor Unions, considerable literature was sent out to stir up the local unions to activity in their respective neighborhoods. The officials took part in many conferences also with other bodies interested.

[33] See files of *N. J. Rev. Char. and Cor.*

[34] The attorney-general had expressed the opinion that the old law was unconstitutional and ineffective because of exceptions, in some cases, to the glass and fruit canning industries. *Testimony of Mr. Swayze before Senate committee hearing*. Mar. 9, 1904.

[35] The trade unions would have liked to stand out for a sixteen year age limit. But most of the other advocates thought that was too high, or at least, impossible. Then there was difference among the philanthropic societies over the question of including mercantile and street trades, of an educational test as well as an age limit, of prohibiting night work, and of some of the factory regulations especially pertaining to women. The differences were not so much as to the policy to be striven for in these matters as to the practicability of making a contest for them at the same time that it was sought to establish soundly the fundamental regulation of child labor.

and that, as in 1903, public opinion could not be sufficiently united upon any measure to get it through. Mr. Swayze, therefore, urged upon the various leaders that they make some concessions to each other and come to an agreement as to what they would ask from the legislature for the time being. Pursuant to this the Consumers' League issued a call[36] to a number of interested persons for a conference to be held in Newark early in December. The result of the action of this conference was the organization of the Children's Protective Alliance, which operated through a large committee representing the charitable and philanthropic socities, the labor organizations, and individuals interested in the purpose.[37] Besides its participation in this committee, the independent activity of the Federation of Trades and Labor Unions was enlisted by Mr. Swayze in support of the bill he was preparing.

In the preparation of the bill, the laws and experience of other states were studied. Manufacturers, labor leaders, philanthropists, and all persons interested were frequently consulted. The constitutional consideration also was kept continually in mind, and the advice of the attorney-general was sought in the framing of the measure. Every effort was made to bring all the interests into agreement, so far as possible, before the bill was introduced

[36] Circular letter dated Nov. 20, 1903.

[37] *Newark Evening News*, Dec. 5, 1903; *N. J. Rev. Char. and Cor.*, II, 236; III, 16. Mr. Hugh F. Fox, the chairman of the conference, was authorized to name the members of the committee, which was empowered to add to its own membership. This very independent and expansible committee was so designed purposely, according to Mr. Fox in an interview with the writer, so as to permit it to determine its course according to the exigencies of the moment without any restrictions whatever. A legislative committee of six of its members gave direct attention to the work of lobbying.

into the legislature and thereby forestall as much opposition as could be.

As the principal opposition was expected in the Senate, the bill was introduced there.[38] This was on February 8. Senator Shinn was the chairman of the committee to which it was referred. A month passed by before anything was heard of it again. Then on March 9 his committee gave a hearing on the measure.[39] At this hearing were present the labor leaders of the state, Mr. Swayze, who drew the bill, Mr. Hugh F. Fox, and many other men and women prominent in charitable and philanthropic enterprises. And even Governor Murphy found time to attend for a part of the hearing. To oppose the bill there were only a delegation of glass blowers,[40] who limited their opposition to the section which prohibited the employment of children below sixteen betweeen six o'clock P M. and six A. M. The glass blowers work in day and night shifts which alternate every week, and the numerous tending boys follow the same order. The law as proposed would cut out a large number of the boys from their usual turn on the night shift and necessitate the resort to more older boys to do that work. But there is always a scarcity of boys anyway, and this would be aggravated by the new law. Because of this and some other considerations, the glass manufacturers and some of the blowers were desperately opposed to this section in the bill. It is worth noting that there was no representative of the textile manufacturers of Passaic county at the hearing. This may have been because they had already sent a delegation to Governor Murphy. Their

[38] Senate Bill 86.

[39] See *Paterson Daily Press*, Mar. 10, 1904, for account of hearing. Also *Daily State Gazette*, same date.

[40] This was the attitude of some members, but not of the glass blowers' organization.

contention was chiefly against the limitation of hours for minors under sixteen to ten a day and fifty-five a week.[41] Notwithstanding the strenuous opposition from the glass industry, the bill was reported without amendment on March 15. When the bill came up for consideration the next day, a number of petitions were presented against any amendment of the bill. Yet several changes were attempted and some were made,[42] including the removal of the restriction on night work, which was fought for by the glass industry. The measure as amended passed the Senate March 22 by the unanimous vote of the eighteen senators present,[43] and was put through the House in two days, passing by a vote of fifty-five *ayes* to no *nays*.[44] With the signature of Governor Murphy it became the act of March 24, 1904.[45]

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[41] *Paterson Guardian*, Feb. 1904. They also took exception to some of the administrative provisions, but accepted the principle of restricting child labor and did not question the age limit of fourteen.

[42] For these proceedings, see *Senate Journal*, 1904, pp. 352-6.

[43] *Senate Journal*, p. 429.

[44] *Min. House of Assem.*, p. 728.

[45] *Pub. Laws*, 1904, pp. 152-170.

The fact that no opposition to the bill from employers in general appeared before the legislature does not indicate that the measure was framed and passed without any, but rather indicates how carefully that opposition had been met and forestalled, during the preparation of the bill, by conferences with the parties interested. Mr. Swayze informed the writer that he encountered bitter opposition from some manufacturers, who said the law would drive them out of business in competition with other states. But the overwhelming tide in opposition to child labor, that had risen throughout the state, probably showed them that some action was inevitable, and the consultations with them gave them an opportunity to influence the provisions of the bill as much as they could hope to. This pre-legislative opposition was not confined to employers, according to a retrospective editorial in the *Newark Evening News* at the time the law went into effect. "It was a hard struggle by which the new law was obtained. Factory owners in all parts of the state fought against it; parents who should have been engaged

*Provisions of the Act of 1904.*—By the provisions of the act, no child under fourteen shall be "employed, allowed, or permitted to work in any factory, workshop, mill, or place where the manufacture of goods of any kind is carried on." Violation by employer or by parent or other custodian incurs a fine of fifty dollars.[46] To sift out children under the minimum age, the law prescribes certain documentary evidence of age.[47] Native born children are required to have an affidavit, by their parent or custodian, setting forth full information, as detailed in the law, concerning them.[48] This affidavit must be accompanied by independent evidence, which may be either a birth certificate from the legal custodian of the public registry of births for the place where the child was born, or, if such birth certificate cannot be had, a certificate of baptism from the person having custody of the church or parish record of baptisms where the child was baptized.

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in better work opposed it; even state officials, whose duty it was to enforce the old laws, argued speciously against the more comprehensive protection of children." (Sept. 1, 1904.)

That there was strong opposition in the Senate is apparent from the delay in the progress of the bill. Indeed, it was feared by many friends of the bill that it would never get through that body. The writer has been told by one who was in a position to know, that if it had not been for pressure brought by Governor Murphy at critical moments the measure would have been lost by the way.

[46] Section 1.

[47] Section 3.

[48] The form of affidavit required by the inspection department calls for the name of the child, his residence, place and date of birth, name of father, maiden name of mother, name and location of the church attended by the child, the date of his baptism with name and location of the church where he was baptized, name and location of the school last attended. In the case of foreign born children, a further statement is required that the child described in the affidavit is the same as the one mentioned and described in the passport which must accompany the affidavit.

In this latter case, the affidavit shall set forth the age at which the child was baptized. But if the certificate of baptism does not state the age at the time of baptism, other evidence must be furnished to show that age. This contingency, however, is infrequent. The baptismal certificate is used widely, but almost wholly in the case of Catholic children, who are baptized very shortly after birth, and whose certificates always state the date of birth as well as the date of baptism. For foreign born children is prescribed a similar affidavit from their parent or custodian, supplemented by the passport, or a true copy thereof, under which they entered the country. And the affidavit must state that the child named therein is the same as the one described in the passport.[49] This documentary evidence of age, whether for native born or foreign born, must accompany the affidavit. The affidavit and accompanying papers are taken by the child to his prospective employer as evidence that he has reached the age beyond which the law permits him to work. It not infrequently happens that a birth certificate or a baptismal certificate cannot be obtained by a native born child and that the passport has been lost in the case of a foreign born child. In such cases the commissioner of labor,[50] and he only, is authorized to issue a permit of employment upon any evidence of the child's age that satisfies him. This permit then accompanies the affidavit as the supplementary evidence of age.

The law does not command employers to require this evidence from children employed by them, but it puts them

[49] Passports are the only evidence of age for foreign children which are mentioned in the law. But other evidences are accepted by the department. Foreign birth certificates, and even a school report for a child born in Hungary were among the papers found by the writer in factories visited by him.

[50] The chief of the department of inspection is known by this title.

under the strongest possible inducement to do so by providing that if these documents are filed with them at the time a child is employed, and if correct copies are mailed to the department at Trenton within twenty-four hours after they are filed, they will be accepted as conclusive proof of the child's age in any suit against the employer for violation of the law.[51] So that, unless an employer chooses to take the risk of employing a child under age, he will refuse to employ an applicant unless and until the latter furnishes the prescribed evidence of age. The fact that this is optional may seem at first thought to be a fatal weakness in the law. But this unique provision is actually one of the most valuable features in it. The risk attending the neglect of the option is so great that employers almost universally require an applicant to bring the specified evidence with him. When this is sent to Trenton, the department is given the opportunity, at the very outset of the child's employment, to test his claim that he is of legal age for working. It results that children who are under age and who, therefore, cannot supply the needed evidence do not find employment in the first place, except with the most venturesome manufacturers. Even then they are liable to be caught up by the inspector when he makes his call.

The act empowers the inspectors to prepare these affi-

[51] Mr. Swayze's idea in drawing the law in this way was this. Employers would not require such evidence unless there was some motive to do so. A penalty for failure to do so would supply one form of motive. But that would be ineffective unless enforced, and enforcement would add one more care to the department. But by absolving from responsibility those who should comply with the prescribed practice, employers would be subjected to the strongest possible motive so to comply. Those who might refuse would also probably disregard the liability to a penalty. Thus as good an observance of the practice would be secured without imposing on the department any burdens of enforcing it. This will be discussed later.

davits, but not to charge any fee for it. Also the affidavits may be prepared by any person authorized by law to administer an oath. In practice, most of those made out by such persons are the work of notaries public. This, however, does not permit the falsification practiced under the old law, for the affidavit itself is of no value. It must be accompanied by the prescribed evidence of age. Inconsistency between the affidavit and the supplementary papers would be at once detected when the copies were sent to the department at Trenton, or by the inspector in the factory. The only room for deceit is in securing false papers or in altering them after they have been secured. As to the former, the probability of deliberate falsehood by public registry officials or the parish clergy is not very great. As to the latter, attempts are made to alter papers, but usually it is so bunglingly done that it is immediately detected. The general permission to prepare these papers, therefore, does not open much of a loophole to the continued employment of children before they reach the legal age. The evil in it lies in the added annoyance to the inspectors and in the fact that notaries who are careless or, not infrequently, unscrupulous take an affidavit for the sake of the fee, although the papers offered to supplement it show the child to be under age or are altered, and even sometimes plainly altered. In such cases the parents pay the fee to no purpose, for if the child succeeds in getting employment, it is sooner or later discovered. This evil, however, is relieved by the authority of the inspectors to take affidavits for this purpose. The fact that they may not charge any fee and the fact that they understand the requirements and have an interest in seeing that the requirements are met, are causing an increasing number of applicants to go to them rather than to a notary.

Besides this check on the initial employment of children under age, the subsequent check on their employment through the visits of the inspectors is strengthened by the requirement that employers of minors under sixteen years of age shall keep a register of "all minors working under certificates, transcripts, passports, or affidavits; such registers and certificates, transcripts and affidavits shall be produced for inspection upon demand" of the inspectors or of such truant officers as may have been authorized by the commissioner of labor to demand them. Failure to keep such a register or refusal to produce it or the documents for inspection incurs a fine of $50 for each offense.[52] Presumably, it was the intention in this section to require a register for every child employed under sixteen years. But, by the wording, it demands it only for those under sixteen who are working under the documentary evidence of age prescribed. As the exaction of this evidence is optional with the employer, it leaves the completeness of his register correspondingly optional. Yet, as already stated, it is the usual choice of employers to require the evidence specified and to keep the papers on file, so that the inspector has at hand in the factory this aid in checking up any child he may find whose age may be questioned.

The law aims to prevent deceit in making out the papers by a provision that any person who swears falsly to an affidavit or who presents a certificate or passport known to be false, or any person who aids in any of these acts, is subject to a penalty of $50.

One more provision in the administrative features of the law remains to be stated. In case there is doubt of the age of a child, the commissioner of labor or any inspector is empowered to demand of the parent or custodian satis-

[52] Section 5.

factory proof of the child's age within five days, after which, if it is not then furnished, the commissioner of labor, but not the deputy inspector,[53] may order the employer to discharge the child until such proof is furnished. Failure to do so incurs a fine of $50.

The practical operation of these provisions may be briefly summarized. As a condition of securing employment, a child under sixteen must bring the prescribed papers to the employer, unless the employer is willing to run the risk of the penalty if the child prove to be under age. Having the papers, the employer is impelled to send copies to the department at once in order to relieve himself of responsibility in case the papers prove to be false. This gives the department the opportunity to examine the papers at the beginning of the child's employment and, if they are found insufficient, to order the child to supply satisfactory proof of his age within five days; or, in case he was trying to deceive and cannot do so, the department has the opportunity to order his discharge at the outset of his employment. Without this opportunity, the child might continue undisturbed until the next visit of the inspector. Another merit in this provision is that, if a child is discharged from one factory, he cannot secure employment anywhere else without the department being informed of it at once, when the new employer sends the copies of

[53] The original proposal gave the inspectors authority to discharge any such child forthwith. But this was objected to by the employers. A delegation from the mill owners of Passaic county urged upon the Governor that a reasonable time be given in which to furnish proof and that orders of discharge be made only by the commissioner. (*Paterson Guardian*, Feb. 24, 1904.) This was reasonable. Otherwise an employer might have his force depleted by the discharge of a child who could, in a short time, establish his right to work. Then, the power of discharge in the hands of the deputies was one cause of abuses under the old law.

the child's papers to Trenton. The hide-and-seek game which discharged children could play with the inspectors under the old law is thus forestalled.[54] If, on the other hand, an employer should assume the risk and fail to send copies of a child's papers to the department, or if he should fail to require them at all, there is left the check of the inspector's visit. If the inspector takes the name of every child whose appearance supports a reasonable question as to his age, he can check up his suspicions by consulting the employer's file. If there are no papers there for the child in question, or, if the papers, because of not having been sent to Trenton, are unsatisfactory, the inspector, as well as the commissioner of labor, can demand the child to bring satisfactory proof of his age within five days. If that is not done, the commissioner of labor may order the employer to discharge the child. The department can also investigate the case and, if proof is found that the child is under age, prosecute the employer, who, be it noted, would in the present case be without the immunity he might have had by securing the papers and sending them to Trenton. In a word, then, if the employer secures the papers and submits them to the commissioner, the department is enabled at once to pass upon the legality of the child's employment. The department loses its right to prosecute the employer in case of illegal employment, but that is of no consequence because it secures compliance with the law without the need of prosecution. If, on the other hand, the employer does not secure and submit the papers, the department has the usual recourse open to it anyway, through inspection

[54] Mr. Swayze, who drew the law, informed the writer that he regarded this provision of the law as its most valuable feature. It was not until he hit upon this device that he felt that he had the law really air-tight.

and prosecution, to secure compliance with the law. It will be noted that in dealing with suspicious cases, the department does not have to prove anything as to a child's age in order to stop his employment. The burden of proof is upon the parent. If the department is unsatisfied with the proof offered, it can refuse to let the child work until satisfactory proof is furnished. Under the old law, practically, a child might work until the department proved him to be under the legal age. Under the present law, he may not work until he is proven to be above the legal age.

Another safeguard against the return to employment of a child discharged from a factory is the provision requiring the department to send within twenty-four hours to the principal of the local public school the name and residence of the child and the place from which he has been discharged.[55] This opens the way to get him under the surveillance of local school officers and prevent him from running the street. The effectiveness of this provision depends upon the enterprise and interest of the local school authorities. But when that is strong, this provision affords one more channel through which that influence can be counted for the enforcement of the law.

The present law contains no provision for a minimum school attendance or other educational qualification. The principle of a minimum physical condition is retained in section 7, which empowers the commissioner or any deputy to demand a "certificate of physical fitness from some regular practicing physician" for any minor under sixteen years of age who may appear to the inspector to be physically unable to do the work in which such minor is employed. Until the certificate is furnished,

[55] Section 45.

the employer may be forbidden to employ the child under penalty of a fine of $25.

Turning from the minimum conditions of employment to other restrictions, the hours for minors under sixteen employed in manufacturing were limited to not more than ten in any one day or fifty-five in any week.[56] By another section, no minor under sixteen shall be "required, allowed, or permitted" to clean machinery in motion or work "between the fixed and traversing parts" of any machinery while it is in motion.[57] Again, factories and workshops in which women and children are employed, and where dusty work is carried on, are required to be lime-washed or painted at least once in every twelve months.[58]

*Supplementary Measures: Extension of Policy to Other Employments.*—Since 1904 the efforts of those behind child labor legislation have been directed toward extending the restrictions to other employments and to prohibiting night work for children. The year 1905 was allowed to go by apparently because it was thought best not to attempt any new legislation until the act of 1904

[56] Section 9. Originally this section provided also, as noted above, that no child under sixteen should work between six o'clock in the evening and six o'clock in the morning. This section was attacked more fiercely than any other pertaining to child labor. The glass industry wished to employ the tending boys during the regular night shifts. The textile, and some other industries with a seasonal demand for their product, wished to run overtime at certain periods of the year, and many wished to run sixty hours a week. Though the bill left the committee unamended, the prohibition of night work was stricken from the bill on the floor of the Senate. The debate on the bill centered upon this section in its bearing on the glass industry. Only one senator voted to retain this clause.

[57] Section 21.

[58] Section 24.

had gotten well into operation and the business of the state had become adjusted to it.[64]

In his message of 1906, Governor Stokes suggested the extension of the act of 1904 to mercantile and other pursuits as a "subject worthy of thought" by the legislators.[65] In that year a bill was introduced as an amendment to the compulsory attendance feature of the school law, but which might have had important effects on the employment of children in occupations not included in the act of 1904. This measure[66] forbade that any child between seven and fourteen years of age,—the age for compulsory attendance,—should be "employed, suffered, or permitted to work at any gainful occupation" during school hours. Truant officers were given authority to enter any place where gainful occupations are carried on to ascertain whether any minors are employed there in violation of the act. The enforcement of such a law would keep children out of all employments where it was not profitable to use them only for the days and hours when the schools are not in session. But this measure would have been ineffectual in most parts of the state; for, as is shown in the discussion of the compulsory attendance law, the provision of truant officers, upon whom its enforcement would have depended, was optional with each locality, so that the efforts to enforce the attendance laws were very uneven throughout the state. The measure, however, did not become a law, although it appears to have passed both houses.[67]

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[64] *N. J. Rev. Char. and Cor.*, III, p. 215.

[65] *Message, Gov. Stokes,* 1906, p. 11.

[66] House Bill 241, 1906.

[67] It is recorded as having passed the House, (*Min. House of Assem.*, 1906, p. 584) and the Senate (*Senate Journal,* 1906, p. 860), and as having been delivered to the Governor. (*Min. House of Assem.*, p. 1299.) Yet it is not found in the session laws for 1906,

In 1907 two bills were introduced to extend the child labor restrictions to other employment. One merely applied the prohibition to mercantile establishments, and this in a very crude way.[68] This failed to pass even the House. The other was in the form of an amendment to the general public school law. It would have extended the restriction to all occupations and would have added an educational minimum to the minimum age limit.[69] But this bill also failed to pass.[70] In the session of 1909, and again in 1910, was introduced a comprehensive bill applying the law for factory employment to children in mercantile employment during the hours the public schools are in session. This had the support of the child labor organizations and of the commissioner of labor.[71] It passed the House each session but failed to make any im-

or in the file of passed and approved bills kept by the Secretary of State, or in the record of vetoed bills, or among the files of "dead" bills. Apparently it was lost or stolen, a fate which sometimes befalls bills in the rush at the end of the session.

[68] House Bill 287, 1907. It had no provision whatever for testing the age of children so employed.

[69] House Bill 316, 1907. It added to the section on compulsory attendance a provision that no child under sixteen should be employed "at any gainful occupation" without a certificate from the local board of education, or some officer designated by it, showing that there had been left with the board proof that the child was at least fourteen years old, like that required in the act of 1904, and showing that he could read and write legibly simple sentences in English. The certificates were to be signed by the child as well as the official issuing them. Employers were required to keep these certificates on file and offer them for examination by factory inspectors and truant officers.

[70] After being twice recalled for amendment, the measure passed the House without a dissenting vote near the close of the session. (*Min. House of Assem.*, 1907, p. 1026.) It was then rushed through the Senate in one day and passed with only one negative vote. But the passage was at once reconsidered without a single protesting vote. (*Senate Journal*, 1907, pp. 916, 923.) There the record ends.

[71] *Rept. Dept. of Labor*, 1909, p. 12.

pression on the Senate.[72] Thus have failed all efforts to extend the minimum age limit beyond manufacturing employments, to which alone it is still restricted.

*Night Work for Children.*—The efforts to abolish night work for children under sixteen years of age have been maintained with untiring persistency against an equally persistent opposition, chiefly from the glass industry. Success was first attained in the field of bakeshop and mercantile employment, but only with qualifications. In 1903 the bakeshop law was amended. One provision of the amending act forbade the employment of minors under eighteen years of age in any bakery between seven o'clock in the evening and seven o'clock in the morning.[73] But this was generally disregarded. In 1905 the bakery law was up again. On this occasion the prohibiting clause was improved to read that no such minor "shall be employed, allowed, permitted, or required" to work in a bakery between the hours stated.[74] This law was the work of the bakers' union, supported by the Federation of Trades and Labor Unions.[75] The Master Bakers' Association at once took measures to secure the alteration of this law.[76] But two attempts to reduce the age of restriction from eighteen to fifteen have failed.[77]

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[72] A copy of this bill and the facts concerning it were furnished to the writer by Commissioner of Labor Bryant.

[73] *Pub. Laws*, 1903, pp. 98-101, sec. 5.

[74] *Pub. Laws*, 1905, pp. 203-6, sec. 9.

[75] *Trade Union Advocate*, Apr. 24, 1905; *Proceedings Conv. Fed. Trade and Lab. Unions*, 1905 (not paged).

[76] *Proceedings Conv. Fed. Trade and Lab. Unions*, 1905 (not paged).

[77] House Bill 275, 1907. This passed the House by a vote of 53 to 0 (*Min. House of Assem.*, p. 610), but was not reported from committee in the Senate. The second attempt was in 1908. House Bill 80 passed both houses before the labor people were aware of its

In 1906 a bill was introduced into the House,[78] as the result of an agitation by the Consumers' League supported by the Childrens' Protective Alliance,[79] prohibiting work by children under sixteen at night in mercantile establishments. This met the opposition of the glass blowers who feared that it might prepare the way for a measure affecting their industry.[80] It passed the House after being lost for want of a sufficient majority,[81] but was never reported from committee in the Senate. The same bill was introduced the next year in behalf of the same agencies.[82] This time it became a law, and without amendment.[83] By its provisions, no child under sixteen years may be employed in any mercantile establishment for more than fifty-eight hours a week, or between seven o'clock in the evening and the same hour in the morning. But exception is made for the one day each week, when the hour is extended to nine o'clock, and for the time between December 15 and December 25, when the hour is ten o'clock. To insure the observance of the age limit, every mercantile employer of children "actually or apparently" under sixteen years old is required to keep on file the same evidences of age as are prescribed in the act of 1904. The commissioner of labor, similarly, is given the same power and duty to enforce this law. The organizations behind the measure would have wished that the exceptions in the law had not been allowed. But it prob-

purport. Their legislative committee then interceded with the Governor, who vetoed the bill. *H. J. Gottlob, Chr. Leg. Com.*

[78] House Bill 386.

[79] *N. J. Rev. Char. and Cor.*, V, 35.

[80] *Trade Union Advocate*, Mar. 30, 1906. To meet this opposition, the bill was amended so as specifically not to apply to manufacturing establishments. *Min. House of Assem.*, p. 885.

[81] *Min. House of Assem.*, pp. 847, 886.

[82] *N. J. Rev. Char. and Cor.*, V, 353.

[83] *Pub. Laws*, 1907, pp. 552-5.

ably could not have passed without them. In its present form, it is said to have met the approval of the leading department store managers of Newark, to whom it was submitted.[84]

The efforts to commit the state to the prohibition of night work for children in manufacturing did not succeed until the last session of the legislature. When the clause prohibiting work at night in bakeries by minors under eighteen was revised in 1905, it was hoped by the opponents of all night work by children that the discussion of this provision might facilitate the passage by the next legislature of such a law as they desired.[85] As the time for the session of 1906 approached, a campaign was begun under the leadership of the Childrens' Protective Alliance,[86] representing the charitable and philanthropic interests, and supported by the officers of the Federation of Trades and Labor Unions[87] and the National Child Labor Committee.[88] A bill was introduced restoring to the law of 1904 the clause prohibiting night work by minors under sixteen years between six o'clock in the evening and the same hour in the morning.[89] The opposition of the glass industry, however, prevented its passage,[90] in spite of a very general support. The next year

[84] *Newark Evening News,* May 15, 1907.

[85] Hugh F. Fox in *Annals Amer. Acad.,* XXV.

[86] *N. J. Rev. Char. and Cor.,* V, 35.

[87] *Ibid.,* V, 71; *Daily State Gazette,* Jan. 29, 1906.

[88] The National Child Labor Committee prepared and sent out in March a four page circular defending the proposed law and urging individuals and organizations to express themselves in behalf of the bill by resolutions and petitions and personal letters to their representatives.

[89] House Bill 314.

[90] On third reading an assemblyman from the glass districts attacked it (*N. J. Rev. Char. and Cor.* V, 153) and it was recommitted. (*Min. House of Assem.,* p. 599.) At a hearing afterward held there appeared in behalf of the bill the presidents of the Chil-

the issue was resumed. The Childrens' Protective Alliance had the same bill introduced again.[91] A determined agitation was carried on in its behalf. The measure passed the House[92] after a delay of a month and a half, during which time a hearing was held upon it by the committee having it in charge.[93] But the opposition of the glass industry again defeated it, for it was never reported by the Senate committee, although two hearings were given it.[94] The industrial depression and the passage by the legislature in 1907 of a measure which indirectly restricted the supply of boys for the glass industry[95] led some of the advocates of the night work bill to consider the year 1908 as unfavorable for a renewal of the contest with the glass interests.[96] However, the National Child Labor Committee and the Consumers' League had the same bill introduced that year.[97] Again the measure

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dren's Protective Alliance, the State Charities Aid Association, the Consumers' League, the secretary of the National Child Labor Committee, the president of the Federation of Trades and Labor Unions, the first vice-president, who was a glass blower, and several minor officials and members, and besides a manufacturer. The only opposition to the bill was by William M. Doughty, a glass blower and at one time an officer in the national organization of glass blowers, and some fellow glass blowers. (*Newark Evening News*, Mar. 21, 1906.) But the bill was never reported again.

[91] House Bill 90. *N. J. Rev. Char. and Cor.*, V, 351.

[92] The vote was 44 *ayes* to 15 *nays*. *Min. House of Assem.*, p. 334.

[93] For arguments see *Newark Evening News*, Feb. 26, 1907.

[94] For accounts see *Ibid.*, Mar. 26, and Apr. 2, 1907.

[95] This regulated the adoption by residents in New Jersey of children brought from without the state.

[96] *N. J. Rev. of Char. and Cor.*, VII, 128; Letter by Mrs. Emily E. Williamson to National Child Labor Committee, dated Mar. 19, 1908.

[97] House Bill 211.

passed the House[98] after hearings before the committee,[99] but was held up in the Senate. A like fate befell a bill in 1909, in spite of a vigorous campaign by the leaders of opinion.[100] When the legislature met again in 1910, the advocates of the law pressed their measure again with a more perfect organization. This time they had the sentiment throughout the state aroused to the point of exerting pressure upon the legislators. Besides the Child Labor Committee of the state, the Consumers' League, labor unions, women's clubs, churches, and other organigations took an active part. Newspapers voiced this sentiment. Spokesmen for this opinion went to Trenton and lobbied for the bill at critical times. The measure, fixing an age limit of sixteen years for night work, passed the House in due time, as usual. But it met determined opposition in the Senate. Senator Plummer, chairman of the committee to which it was referred, represented Salem county in the glass manufacturing section. He frankly declared his opposition. But the public pressure was too strong. A caucus[101] of the Republican majority decided to pass the bill after a compromise in which an amendment was added making the age limit fifteen years for one year before it becomes sixteen years. This adds to the child labor code the provision that after July 1, 1910, the employment of minors under fifteen years of age in factories between seven P. M. and seven A. M. is prohibited; after July 1, 1911, the age limit for such pro-

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[98] *Senate Journal,* p. 832. Minutes of Assembly not available at time of writing.

[99] *Newark Evening News,* Mar. 17, 1908; *State Gazette,* Mar. 18, 1908.

[100] See *Newark Evening News* during the session of the legislature.

[101] *Newark Star,* Apr. 1, 1910.

hibition will be raised to sixteen years.[102] This act is a most important addition to the law and is regarded by its advocates as a most satisfying achievement, after five years of persistent effort.

*Judicial Interpretation*:—The act of 1904 has been subjected to judicial interpretation at two points. The Skillman Hardware Manufacturing Company of Trenton carried to the Supreme Court some cases early brought against it for employing children under age. The plea was that the act was unconstitutional in that the object of it was not expressed in the title and that it violated the fourteenth amendment by abridging the privileges and immunities of citizens. The first point was entirely technical, but the second challenged the policy in a vital particular. The court, however, rejected both contentions and sustained the law.[103] Another case involves the right of inspectors to enter an establishment for the purpose of an inspection. It was brought against the N. Z. Graves Company of Camden. The trial judge directed a verdict for the company, but the state appealed to the Supreme Court and secured a decision overruling the trial judge and ordering a new trial. This did not dispose of this particular case, but it is considered as establishing the right in question, and the defendant company so accepted it.[104].

*The Compulsory Attendance Law: Act of 1903.*—The interest in the welfare of children, as shown in the sentiment against child labor, appeared also in the demand for a more effective compulsory attendance law. The move-

[102] The writer has not had access to this law, but the provisions were supplied to him by Commissioner of Labor Bryant.

[103] *Rept. Dept. of Labor*, 1908, p. 7-8. The writer has not seen the opinions of the court in either of these cases.

[104] The case is reported in 71 *Atlantic Reporter*, p. 60, but the writer has not had access to it.

ment toward that began in 1900. It had been felt that the whole school law needed revision and codification. The agitation for that led to the appointment of a commission by the Governor to prepare a measure. This was reported to the legislature in 1900 and became the act of March 23, of that year.[105] This law very materially strengthened the provision for compulsory attendance. The act was found unconstitutional on grounds not concerned with the attendance requirements, as was also a succeeding act designed to meet the objections of the court, so that it was not until 1903 that the law was finally settled. But the stiffening of the compulsory attendance provisions by this measure deserves notice as indicating what the legislature had come to stand for on that matter. This is not to be taken as indicating any such agitation as preceded the passage of the child labor law of 1904. The sections in question in the law were framed by the commission, after open hearings and without pressure from any source, in accordance with its judgment and that of the educational authorities as to the needs of an effective school law.[106] The details of this act will be passed over, for they were largely the same as in the final act of 1903[107] which is here described.

*Provisions of the Law.*—By the new law the administrative weakness in the short period of attendance required by the law of 1885 was corrected and a large advance in policy was made. The state was now prepared to require that every parent or guardian send every child between the ages of seven and fourteen to a public school each day those schools were in session, unless excused by

[105] *Pub. Laws,* 1900, pp. 192-281.

[106] Letter from ex-Governor Stokes, who was in the Senate in 1900 and chairman of the commission to revise the law.

[107] Oct. 19, 1903, Second Special Session 1903. Bound with Laws of 1904.

the board of education because of physical or mental incapacity, or because of its receiving equivalent instruction in a private school or at home.[108]

Authorization is given for parental schools for habitual truants and incorrigible children between seven and fourteen years of age,[109] who may be required by the local board of education to attend, or, with the written consent of the parent, to be confined therein. If any child refuses to attend, the board of education may have a warrant[110] issued by a justice of the peace, police justice, or city or town recorder, and have the child brought before the court. The magistrate may return him to his parent, who assumes the responsibility for his proper conduct thereafter, or to his teacher on trial, or turn him over to the juvenile court, which may as an extremity commit him to be confined in a disciplinary institution.[111]

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[108] Sec. 153.

[109] The act of 1900 had fifteen years for the higher age. But its upper compulsory age was only twelve years, children between twelve and fifteen being required to attend only sixteen weeks each year as a condition for taking employment. The constraint of the parental school upon children over twelve, therefore, would have been only for the sixteen weeks out of each year; and the shortness of this period would, for reasons already noted, have hindered the exacting of even that. But the present measure, with its higher compulsory limit, permits the holding of children under this discipline, if necessary, until they are fourteen. Hence, although appearing in this feature to retreat one year in the application of the compulsory principle, it really makes a considerable advance.

[110] By the act of 1900 the truant officer could arrest him without a warrant.

[111] This differs from the provision of the act of 1900, which empowered the magistrate to commit the child directly to confinement in the parental school or in a reformatory. This change was made because the regular session of the legislature in the early part of 1903 provided for the establishment of county juvenile courts. (*Pub. Laws*, 1903, pp. 447-80.) This substitution with reference to an independent sentiment, however, left the

Parental responsibility is insured by liability to the penalties for a disorderly person.[112]

The imperfect provision for truant officers was in part remedied.[113] Boards of education were authorized, but not required, to provide one or more truant officers and fix their compensation. If it was wished, these officers might be secured from the local police force, where one existed, on a written request from the board of education.

Attention was also given to the problem of funds for school buildings and for the expenses of truant officers and parental schools. The legislature committed itself to an unlimited power of taxation to cities for the purpose of providing funds for current school expenses,[114] but

law somewhat awkward, if not obscure, as to the committment of children to parental schools in districts not coterminous with a legal "municipality." The juvenile court act empowered the judge to commit children to a state reformatory, or to a public institution maintained by the county or by a city, town, township, or other municipality, for the "care, custody, instruction, and reform of juvenile offenders." It was thus not clearly and definitely stated between the two acts that the juvenile court could commit a child to the parental school in any district whatever. Yet the question concerns the consistency of the law rather than the practice under it, for small districts would not maintain independent parental schools. The law itself was set right by an act for county parental schools in 1906, which is noted below.

The principle, if not the form, of this new provision was an improvement over the act of 1900. By taking the power of committment out of the hands of a magistrate as provided in the act of 1900, and putting it in those of the judge of the juvenile court,—who was the judge of the county court of common pleas for the time being,—it gave the disposition of the case to a man probably of larger calibre, and made the procedure more regular, thereby reducing the vulnerability of the law to attacks on its constitutionality.

[112] Secs. 154, 158.

[113] Secs. 155, 156, 158, 160.

[114] Secs. 75, 76, 95, 97.

not to an unlimited power to issue school bonds. Yet it made a concession in this matter. It limited the issue of bonds for the purchase of land and the construction of buildings to an aggregate of 3 per cent of the taxable value of real and personal property. But any charter restriction on a city's indebtedness in general was expressly held not to apply to issues of these school bonds. In this connection should be noted also an act of 1901[115] which was incorporated in the law of 1903.[116] The basis for apportioning the proceeds of the state school fund to the various localities had been the number of children of school age. By this act, this was changed to the aggregate number of days attendance of all pupils during the year. The change was in part due to the abandonment of the annual school census, because of the continued unreliability of the returns. But Governor Voorhees, in his message of 1901, urged as "a most important reason" for the change that it would stimulate communities to increase their enrollment and bring up the regularity of their attendance.[117]

The act of 1903 had not been in operation very long before it was discovered that the wording permitted an ingenious evasion. According to the law, the person having legal control of every child between seven and fourteen years old shall, "unless such child is being taught at home in the branches usually taught in public schools to children of his or her age," send the child to "a day school each day while such school shall be in session", unless excused by the board of education as provided. Literally there was no requirement as to the length of the sessions of the day school attended or as

[115] *Pub. Laws,* 1901, pp. 378-80.

[116] Sec. 16.

[117] *Message Gov. Voorhees,* 1901, p. 14.

to the subjects taught there, though, if taught at home, the child must have the usual public school branches. It was found in Newark that some parents had organized a "school" which their children attended for one hour early in the day, after which they were free to work. To meet this subterfuge, the act was amended in 1905 so as to require that specified common school branches be taught in the school attended and that the attendance of the child be for the days and hours that the public schools are in session.[118]

*Defects of the Attendance Law of 1903.*—The sections bearing on compulsory attendance in the act of 1903 are well drawn for administrative purposes except that the use of the provisions for enforcement are left to the option of the localities. This, in effect, leaves the whole policy of compulsory attendance to the discretion of each community, except in so far as each community is subjected to the tug of the state's resolution in the matter. This is at the heart of numerous criticisms upon it. It has been urged that a centralized state administrative force, similar to the factory inspection, is required.[119]

Another failing was that the provision for parental schools hardly met the case of small towns and cities. These would not have enough children requiring such discipline to justify the expense. And no authorization was given for union schools of this character for several districts.[120] Again, the absence of a school census has been felt to be a handicap upon efforts to discover

[118] *Pub. Laws,* 1905, p. 335.

[119] Supt. Maxson of Plainfield, in *First Conf. Char. and Cor.,* Feb. 1902, p. 135. Also by various educational officers and others in interviews with the writer.

[120] Supt. Asbury Park, in *Rept. Supt. Pub. Instr.,* 1904, p. 82. Supt. Maxson, in place cited, p. 133.

every child of school age.[121] Some cities have taken their own census; but this is too expensive for all to undertake. The state's experience with a school census has not been such as to encourage a return to one. But the change in the basis of apportioning the school monies has removed the chief reason for the former unreliability of the returns and the present interest in the compulsory law adds to the reasons for renewing it.

*Supplementary Acts Since 1903.*—The matter of parental schools has received further attention. By an act of 1906,[122] counties with a population of 150,000 or more and having a juvenile court were authorized to establish a "school of detention" for delinquent children, including those habitually truant or disorderly in school. Funds might be raised by issuing county bonds for an amount not over one-half of one per cent of the ratables of the county. An act of 1908[123] removed the population limit in the law of 1906 and thereby permitted any county having a juvenile court to provide itself with a detention school. The act went further and made each such school with its land a special school district entitled to its share with other districts in the money provided by the state for public schools. In the case of counties where such an independent school would not be justified by the number of children, the county authorities are empowered to arrange with any recognized private society or institution for the care of the children under limitations in the law guarding against abuse or neglect.

Another amendment of the 1908 legislature altered

[121] Supt. Millville, *Rept. Supt. Pub. Instr.*, 1905, p. 135; Supt. Newark, *Rept. Supt. Pub. Instr.*, 1906, p. 155.

[122] *Pub. Laws*, 1906, pp. 54-6. This was the result of an agitation of three or four years. The state board of education took up the matter in 1905.

[123] *Pub. Laws*, 1908, pp. 625-8.

the standard for required attendance.[124] By this law, every child is required, in effect, to attend school until he is fifteen years old, in any case, and longer, if necessary, until he completes the grammar school course prescribed by the state board of education. If he has met this minimum exaction and is still within seventeen, he must, unless he becomes employed, attend further until he becomes seventeen, at a high school or manual training school. An exception permits a child to be employed as early as fourteen years of age when the board of education is satisfied that employment is necessary. In this case the board of education shall give a certificate exempting the child from attendance at school so long as such employment continues. This law was passed under the pressure from its sponsor, Senator Price, without careful consideration by the legislators, many of whom have confessed that they misjudged its purport.[125]

[124] *Pub. Laws,* 1908, pp. 445-6.
[125] *Trenton Times,* Oct. 27, 1908; *Newark Evening News,* Jan. 7, 1909.

## CHAPTER VI.

### MERITS AND DEFECTS OF THE PRESENT STANDARD

An examination of the present standard in operation shows it to have a high degree of excellence. Questions of purpose, such as what the age limit should be, or what industries or occupations should be included, are not now involved. Accepting the purpose of the policy and the age limit of fourteen years, the object here is to examine the merits of the legal declaration of the policy as a standard for attaining the purpose of the policy.

*Pertaining to the Age Limit.*—The clause prohibiting the employment in factories of children under fourteen years is drawn with such care and precision that no room is left for the subterfuges practiced early in the preceding period to evade the law, or for those subcontractual relations which fell outside of the terms of the first enactment. The responsibility for the presence in a factory of a child under fourteen at work is definitely fixed upon persons whom the law can reach.

The second point of interest, the provision for establishing the age of any child called in question, is arranged for with equal precision and almost equal merit. The burden of proving the age is put uneqivocally upon those in the best position to do so, namely, the parents or guardians. Not only is the burden of proof put upon the parents, but the sort of proof to be accepted is clearly specified and is required to include, besides the declaration of the parents, documentary evidence independent

of that declaration. Deceit can be practiced by the parents only by alteration or forgery of these supplementary papers, or by securing the connivance of the public registrar of births, or of the clergyman, or custodian of the baptismal records, or of the officials who issue the passport. Such deceit is checked by the ease of detecting most alterations and forgeries and by the obstacles to securing the connivance of the other parties. Besides, there are penalties upon such forms of deceit. All this furnishes the administrative department with proof of great reliability. It will be noticed that the school records, which are accepted in many states, are here passed over. Such records are not of quite the same reliability as the evidence prescribed; for parents are under an inducement to overstate the ages of their children to the school officials. It is not alone that they look ahead to their early employment, but also that the mother with many children or with helping to earn the family income is induced to state her child's age too high in order to get him into school and be relieved of the care of him during the day.

There are, however, two respects in which the reliability of the evidence prescribed in the law is lessened. The penalty upon parents is ineffective because the fine, $50, is such a large sum for most parents of child workers that no magistrate will impose it. If he did, there would be few cases where it could be collected, because of the poverty of the defendant. There is a wide opinion that it ought to be graded from a much lower sum.[1] The other weakness is the omission to re-

[1] The commissioner of labor complained of this amount of the fine in his report for 1905 and suggested that it be left to the discretion of the court. (P. 4.) He made similar complaint the next year and suggested that it be fixed at $25. The same

quire a personal description of the child in the affidavit. This opens the way for a younger child to assume the name and use the papers of an older child to whom they are issued. That this has been done seems clear from the testimony of inspectors. But that it is practiced extensively is very doubtful. Unless the true age of the child is close to that stated in the papers he assumes, the disparity will attract the attention of the inspector and cause an investigation at the home of the child. However, this matter and that of the penalty upon parents are defects in the law deserving attention at the first revision.

The provisions for the issue of the papers is not so praiseworthy. The affidavits may be taken by the inspectors, but without a fee, or by any person authorized by law to administer an oath. Of the affidavits taken by the latter class, notaries public take far the greater number. But the notary's interest in the observance of the law is frequently offset by other considerations. In the first place, there is the fee. That is his whether the affidavit is true or false, for his part is to certify that the statements made are sworn to, not that they are true. In the second place, foreign born parents are likely to go to a notary of their own nationality whose sympathies impel him to take the affidavit without scrutinizing

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recommendation has appeared in each succeeding report. Several deputy inspectors and others have expressed the same view to the writer.

A practical difficulty is encountered in the fact that the procedure in these cases is by action for debt, in which the fine is sued for by the state. As suit must be for a definite fixed amount, there is no room for the magistrate to alter the sum, when judgment is given, according to his judgment of the deserts of the defendant. It has been suggested that the commissioner of labor be empowered, after the suit is prosecuted and before judgment is declared, to reduce the amount sued for.

the supplementary evidence for alterations or for other defects or ineligibility. It is not to be understood that this influence of personal sympathy is restricted to cases of foreign born children. Parents with children under age have for both these reasons secured from notaries the papers admitting them to employment. Unless the employer is careful to scrutinize the papers, or to send to the department at Trenton the original documents instead of copies of them,—which alone the law requires, and which would not disclose the alterations,—the child can continue in employment until an inspector's eye falls upon the defective original document in the employer's files. As a matter of fact, the number of such cases does not appear to be large, although obviously it cannot be known with much accuracy. Yet here is a loophole that should be closed. Besides such children under age, the inspectors are constantly finding papers for children of full age which fail to satisfy the law because of some carelessness by the notary who prepared them. This is a more troublesome consequence than the former. If the law required that all such papers should be prepared by authorized agents of the department, fully instructed in the requirements of the law and dominated by the *esprit de corps* of the department, no affidavit would be taken unless the proper sort of supplementary evidence was offered and was without alterations. That is what is done, in effect, at the offices maintained by the department in Newark, Hoboken, and elsewhere, so far as parents use the facilities of these offices instead of going to notaries. But the benefit is lost for those who choose the latter. And that is what those are likely to do who wish to evade the law.

Such a restriction on the issue of the papers would have a further advantage in relieving the inspectors of

much of the responsibility of passing upon the adequacy of the papers while on their rounds of inspection. The documents submitted by parents are written in various languages. An inspector must be able to make out enough of these to ascertain their genuineness and the age of the child. It is needless to say that this cannot always be done by the inspectors. An authorized agent, chosen with this in mind, could prepare an English translation over his signature which would present the evidence to the inspector in a quickly readable, certified form.

The force of the foregoing criticisms on the issuing of the papers is in large part offset by the novel provision in the law which induces the employer to send to the department at Trenton copies of the papers presented by a child within twenty-four hours after they are filed. If a notary issues an affidavit accompanied by a document of the wrong sort, or improperly made out, or which fails to agree with the allegations in the affidavit, the department at once has its attention called specifically to the defensive evidence and is afforded an opportunity to order the child to supply satisfactory evidence or cease work. Otherwise, the error would be undiscovered until the visit of an inspector. Even then it might pass unnoticed if the inspection were made hurriedly or carelessly. Also any evasion of the law through failure of an inspector properly to translate a document in another language would be forestalled at the office of the department. But the above criticism has force in so far as employers accept the risk of defective papers and fail to send them to Trenton.

Experience has shown this provision to be the most effective administrative device in the law. The scheme of bringing under the immediate review of the central

office all documentary evidence filed with employers, upon which children are admitted to employment as being of the age required, deserves a much wider use.[2] The same strict enforcement cannot be secured alone by any restriction of the issue of the papers to authorized agents. There would need to be several of these agents to afford ample opportunity to parents to secure the papers. That would admit lack of uniformity and open the door for mistakes. Besides, even waiving that objection, it would only insure that the papers when issued were correct, but would not put any pressure upon employers to insist on the presentation of such papers by the children. This the New Jersey law accomplishes by granting immunity to employers who secure the papers and submit them at once to the approval of the department. Another result, impossible with any other device, is the prevention of discharged children from getting employment at a new place. When the department orders a child discharged, he cannot find employment elsewhere without the fact being known to the department at once through the submission of the papers to it by the new employer. Without this check, a persistent child might be discharged a dozen times in a year and find reëmployment each time. The force of the law would be expended in merely interrupting the continuity of his employment, not in preventing it. Finally, the New Jersey law solves the problem of relieving the well-intentioned employer from liability through the mistakes or crookedness of parents, or others concerned in preparing the papers, without opening any loophole to those who would evade the law

[2] So far as the writer is aware, this is not found in the code of any other state. If that is so, the author of the law deserves credit for the invention of such an invaluable device.

if they could. This is a problem of great importance and no small difficulty in the laws of most states.

An objection to the New Jersey plan may seem to lie in the extra office work required in the examination of the papers. Practically, this has not proven important in New Jersey. During the last year, some 7000 of these have been submitted to the department.[3] Since the act went into effect in 1904, the number aggregates 26,000.[4] Yet these have been attended to with an office force of three persons besides the commissioner and assistant commissioner. Most of these would be required in any case. The force of the objection is entirely offset when it is considered that fewer inspectors are needed than if the results of the administration depended entirely on their inspections.

As worked out in the New Jersey law, this device is capable of some improvement. The immunity offered through compliance induces far the most of employers to conform to the provision. But there are many who do not trouble themselves to do so, some of them trusting in the accuracy of their own scrutiny of the papers presented to them, some of them daring to violate the law and take their chances of being caught. The action of these employers leaves a number of children working under papers that cannot be examined except by the inspectors on their visits. This creates opportunities for children under age to be employed at least until the next visit of the inspector and possibly longer through his failure to detect the error. It also detracts from the uniformity and strictness of the department's control of the use of the documentary evidence, creating a foggi-

[3] *Rept. Dept. of Labor,* 1909, p. 6.

[4] The report of 1908, p. 5, shows 19,000. Adding the 7000 issued during the last year gives the number 26,000.

ness of administration in which evasions of the law may conceal themselves. This would be corrected by making it mandatory instead of optional upon employers to observe this provision of the law. The offer of immunity through compliance does not appeal to employers such as those mentioned. The risk of a penalty for failure to comply would afford a motive to those who now feel no need of the immunity, because of their confidence in their own carefulness, and would add to the risks tending to check the lawless.

Another improvement would require employers to forward to the department, not copies of the papers filed with them, but the original papers. That would give the department opportunity to detect at once alterations of birth dates or other data which would not be revealed in a copy made according to the changed face of the document. A great many employers now send the original documents instead of copies. But they are not required by the law to do so.

Another improvement might be made in the present law by *requiring* employers to keep on file the prescribed papers for every child under sixteen years. This may have been the intention when the bill was drawn, but the wording of the law, as has been seen, leaves the matter really optional, with a promise of immunity for those who do so and also send copies to the department at Trenton.[5] To make this keeping of a registry man-

[5] The writer found that the general understanding was that such a file was required for all children. That was his own understanding also on first reading the law. But some employers had been advised by counsel that the provision was not mandatory. This fact has been recognized by the commissioner of labor, who has always tactfully avoided pushing the matter to an issue in any case while endeavoring to get employers to observe the provision in the law. This view has been affirmed in an opinion from

datory would add nothing to the burdens or risks of the well-disposed and law-abiding employers, and would assist greatly in checking the lapses of the indifferent and lawless.

The present provisions for establishing the age of any child are criticised in no respect more sharply than in the burdens which they are said to impose upon parents and employers. It is said that the sort of proof of age required by the law cannot be supplied generally by parents, especially in the case of foreign born children These frequently have lost their passports. Many native born children neither come from communities which keep a registry of births nor have been baptized. A view of all the facts, however, shows this burden to be far less than supposed. In the case of foreign born children who have lost their passports, it is a matter of seldom more than a month to write to the native country and secure a certificate of birth. The number of children from countries where births are not registered is negligible. The burden here is thus not more than a month's delay. The difficulty is really greater for native born children; for the public registry of births is much less practiced in the United States. New Jersey has long required such a registry, but it has not been kept with uniform accuracy and continuity throughout the state. But the law provides for all these cases. When the commissioner of labor is satisfied that the specified proof cannot be furnished, he is authorized to consider *any other evidence whatever* that may be available and, if he deems the weight of it sufficient, he may grant a permit which with the affidavit of the parents meets the requirements of the law. There is some burden, how-

the assistant attorney-general given at the request of the commissioner of labor.

ever, in the necessary caution and delay attendant upon a properly guarded exercise of this authority. On the whole, it does not appear probable that many children actually fourteen years of age would be unable either to furnish the specified documents, or to satisfy the commissioner of labor that a permit was warranted. The experience of the department with claims of this sort strengthens that conclusion. The commissioner writes, "The department has had varied experiences in alleged cases of this character, and on the whole it has had abundant occasion to believe that in a large majority of cases which claim they cannot obtain the requisite proofs the child in question has not actually reached the age of fourteen years."[6]

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[6] *Rep. Dept. of Labor,* 1906, p. 4. See also reports for 1907, p. 4, and 1908, p. 5.

Some measure of the importance of this objection may be had from the following data, supplied to the writer by Mr. Dale of the Department of Labor, giving the basis for excluding children from employment in some two hundred cases between November 1, 1907, and November 21, 1908.

| | |
|---|---|
| 1. On account chiefly of evidence from the N. J. Bur. Vit. Stat. | 50 |
| 2. On account chiefly of altered papers | 41 |
| 3. On account chiefly of failure to furnish papers when dem'nd'd | 40 |
| 4. On account chiefly of evidence from church record | 34 |
| 5. On account chiefly of evidence from school record | 15 |
| 6. On account chiefly of evidence from parents | 12 |
| 7. On account chiefly of evidence from child itself | 6 |
| 8. On account chiefly of evidence from passport | 5 |
| 9. On account chiefly of evidence from foreign Bur. Vit. Stat. | 3 |
| 10. On account chiefly of evidence from attending physician | 1 |
| Total | 207 |

Summary

| | | |
|---|---|---|
| Proven to be too young (all except reasons 2 and 3) | 126 | or 61% |
| Altered papers. (Circumstantial evidence too young) | 41 | or 20% |
| Failure to furnish papers demanded. (Indeterminate.) | 40 | or 19% |
| | 207 | 100 |

It appears that in 60 per cent of the cases,—all except such as

The requirements as to proof of age are said to burden employers also. If children actually fourteen years old cannot supply the necessary proof, the legitimate supply of child employees is curtailed for the manufacturers. Besides, in any case, the employer cannot pick up additional children as quickly or with the same freedom from responsibility as if some more easily available documents, such as a mere affidavit, would suffice. Again, many employers depend upon children of foreign birth or ignorant parents. These often find it necessary, in order to secure the labor of a child, to take charge of the matter of securing the needed documents. In such cases, the burden of proving the child to be fourteen is forced by circumstances upon the employer instead of the parent, where it rests legally. In an industry like the glass industry, where the supply of children is chronically short, this becomes a matter of constant irritation. So far as concerns children over fourteen, the conclusions reached above apply here also. The number of such who cannot secure either proof or a permit is probably far less than the number alleged by the critics of the law. Yet so far as concerns the greater delay in the available supply of child workers and the trouble of getting proof for children, the burden is not to be denied.

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2 and 3,—the children were positively shown to be under age. In 20 per cent more,—those with altered papers,—there was strong circumstantial evidence to that effect. In only 19 per cent could the above criticism be raised at all. And of these 19 per cent it is certain that only a part were cases where the child was actually of working age. How many would be a matter of conjecture. Consider also that in 1908-9 the department issued 645 special permits to cover just such cases as those, and the amount of actual hardship on such children becomes relatively unimportant. The question in any case is whether the probable number who thus suffer is sufficient to warrant giving up the age proofs of such administrative value as those which the law requires.

Much of the opposition to the law on these grounds expressed to the writer was plainly directed in fact at the policy of restriction itself, rather than at the devices of restriction. Yet there were many of the critics who accepted the policy and approved the present age limit, but still thought the requirements as to proof were too severe. It is difficult to see, however, how they can be any less so without making the law ineffective. The only other kind of evidence anywhere found acceptable is the school records. But this is by no means universally available. It would not serve for those children who, because of a lax enforcement of the compulsory attendance law in their locality, have no adequate school record, if any at all. In such cases nothing but a resort to some evidence of the date of birth is possible. The present requirements could not, therefore, be dispensed with. The only concession admissible, in the light of experience everywhere, with a really effective law would be to recognize the school record in addition to the present acceptable evidence. But that would not change the situation in fact, for in those cases where the prescribed evidence cannot be furnished, the present law fully permits the commissioner of labor to recognize a suitable school record as sufficient warrant for issuing a permit.

The impression has been repeatedly made upon the writer by critics of the law that what was wanted was to escape altogether all annoyance and trouble from the administration of the laws. But that is impossible. If the policy of preventing the employment of children under any specified age be accepted, which most of these critics openly profess to do, then there must also be accepted whatever is necessary to make the policy effective. Experience has shown that no reliance can be placed upon the deterrent influence of penalties alone: but that some

administrative device is necessary to sift out children under the age limit. Such arrangements for sifting must bear most directly and heavily upon those who have motives to disobey the law. These are the parents and their children and the employers. If evidences of birth and, to complete the list, school records are the only instruments which experience has yet devised to do the sifting effectively, then whatever annoyance the use of these may occasion to parents and employers is inevitable. The only alternative is to abandon the policy, or to say that it will be compulsory in fact only on those who wish to observe it or are too honest to evade it.[7]

The parents and employers could be relieved of the annoyance in the use of these instruments by changing the burden of proof from them to the enforcing officers. But this, also, experience has shown to be fatal to an effective policy. It is far less possible to prevent the employment of children under the prescribed age by discharging those shown to be too young than by admitting only those shown to be old enough. The only justification for changing the burden of proof would be that too many children actually fourteen are shut out from employment because they cannot prove their age. The number of these appears, as shown above[7]. to be very small, in spite of the claims to the contrary. As between sacrificing the interest of these or sacrificing the many who would otherwise slip into employment under age, the balance of justice is with the law as at present.

[7] This is understood by employers themselves. One superintendent of a large factory employing a great many children, while remarking upon the burden of the age proofs, still welcomed them as a protection against unscrupulous competitors who would take advantage of any relaxation in the strictness of the requirements.

[8] Page 110, note 5

Another burden upon parents is the fees for the necessary papers. A certificate of birth from the public registry of the state board of health costs one dollar. The notary's fee is usually fifty cents. Baptismal certificates are sometimes issued without charge out of consideration for the applicant, though sometimes a charge is made.[9] This burden is unnecessarily heavy and unequal. Parents who live within accessible distance of the factory inspector can have the affidavit prepared by him free of charge, although the supplementary document may cost some fee. But not all parents have this opportunity. The state, however, cannot require notaries to accept a smaller fee. This is an additional argument, from grounds of public policy, for authorized agents to issue the affidavit. As to fees for birth certificates and baptismal certificates, the state cannot control those charged by clergymen, but it can reduce the fee for certificates from the public registry of births. It is of interest to note that the city council of Newark has provided for the issuing of birth certificates without charge to those whom the inspectors recommend as deserving such favor.

The correlation between the child labor law and the compulsory attendance law was administratively excellent until the act of 1908 changing the age for compulsory attendance. Until then, the age limit for both employment and required attendance was fourteen years. When the age is the same for both laws, the observance of each profits by the enforcement of the other. In the case of New Jersey this mutual assistance was increased by the provision requiring the commissioner of labor to

[9] An instance was related to the writer of a priest who regularly charged a dollar for such a certificate, and issued it even when the child was under age and could not profit by it. The local inspector had to request him not to issue one unless the child was of age.

report to the local school officials. Accordingly, in the few cases where the enforcement of the law has been pressed, it has produced some confusion. A child may be legally employed without molestation from the Department of Labor, and yet be taken from work by the school authorities for violating the attendance law. Indeed, the permits for employment, issued by the commissioner of labor to children apparently fourteen years old but unable to furnish the prescribed proof, would conflict directly with this law. Commissioner of Labor Bryant, under an opinion by the assistant attorney-general,[10] avoids formal conflict by adding to the permits a clause stating that the permits shall not be taken to exempt the holder from the provisions of the attendance law.

This law was passed under the pressure from its sponsor, Senator Price, without careful consideration by the legislators, many of whom have confessed that they misjudged its purport.[11] It was confidently expected by many persons that it would be amended or repealed at the next session of the legislature in 1909. An attempt by the friends of the child labor and compulsory attendance laws to sound the sentiment of that class on the law showed that there was a general feeling in favor of retaining it. The chief argument of the opponents was not that it should not be enforced, but that it could not be.[12] The law was much discussed before and during the session,[13] but no action was taken. The commissioner

[10] *Newark Star,* Oct. 22, 1908.

[11] *Trenton Times,* Oct. 27, 1908; *Newark Evening News,* Jan. 7, 1909.

[12] *Newark Evening News,* Mar. 14, 1909; *Passaic News,* Mar. 16, 1909.

[13] *E. g., Trenton Times,* Oct. 7, 1908; Oct. 27, 1908; *Newark Evening News,* Jan. 7, 1909.

of labor has pointed out the present confusion and possible dangers to the whole child labor policy of the state if this law is retained and pressed.[14] This part of his report was most widely commented upon by the press notices. It is difficult to see how these two laws can remain as they are and be really effective in the case of those children for whom such legislation is passed. If it were seriously attempted to enforce it, the school officials would have to resort to such a liberal use of the power to grant exemptions to children fourteen years old that many of those whose attendance must be constrained would slip through their fingers, because the constraint is so often necessary on account of the need of employment of the children. On the other hand, if the power of exemptions is sparingly used, it would result in fatal confusion and imperil the whole policy of the state toward its children. The conflict would discredit the child labor law and destroy the prestige which it now has and which adds much to its effectiveness. And this loss would not be offset by the substitution of the attendance law, for it is beyond question that the people of the state are not yet ready to stand behind a fifteen year age limit for child employment.

The joint object of the two laws is defeated on the side of school attendance by the lax enforcement of the attendance law in many localities. This is due to the local option in the matter of providing the necessary means of enforcement. The enforcement can never be uniformly high without a centralized state administration of the law. Such an administration would encounter tremendous, if not insuperable, difficulties unless the state undertook to provide all needed facilities out of the state treasury, for the people would hardly yet submit

[14] *Rept. Dept. of Labor*, 1909, pp. 3-4.

to state interference in local affairs to the extent of state compulsion of local expenditure to meet those needs. Since that logical stage in the development of the policy embarked upon will probably not be reached in New Jersey for some time, this particular state policy will for some years have to depend for its enforcement upon the varying strength of local sentiment.

*Pertaining to Physical Fitness.*—The section of the law giving the commissioner and inspectors power to demand a physician's certificate of physical fitness for any child under sixteen in any occupation for which the child appears unfitted, is of doubtful efficacy. It is more specific than the earlier law. But it is fundamentally weak because it leaves the standard of physical attainment entirely undefined. That is left to each physician who may be called upon to give judgment in the case of any child. Indefiniteness in such a standard is in a large measure inevitable. Physical condition is not a thing that can be yet measured in terms of exact units. The various points to be considered are each so largely a matter of the judgment of the one who makes the examination, that opinion on the sum total of "physical fitness" admits of wide differences. A definition of a physical standard that would mean the same thing to all physicians called upon to apply it is therefore impossible. Yet if not all elements of physical fitness can be defined in the law with precision, there are some of them that can be prescribed with sufficient exactness to admit of a definite minimum in those respects with reference to specified kinds of work. This would not constitute a complete physical minimum. But it would afford a much more definite guide for passing upon a case. It would also be more effective for the purpose of such a minimum. For, with the matter so indefinite as at pres-

ent, inspectors hesitate to make any demands and physicians are unwilling to interpret "physical fitness" so as to set any precedent that means very much. Such a specific minimum, however, is probably one of those refinements requiring dispassionate and expert judgment to which American politics is not yet equal.

Besides indefiniteness in the standard, the law is weak also in leaving to the interested persons the selection of the physician from whom the certificate may be secured. Thus is opened the door to the influence of professional preference for a patron, or other personal considerations, on the expressed judgment of the child's condition. This can be avoided only by providing for the selection of a disinterested physician or by a permanent medical adviser to the department.

*Pertaining to Needy Children.*—One other point of criticism of the minimum standards remains to be noted. The law permits no exceptions from the requirements of the minimum standards established by it. There is a widespread sentiment, among all classes of persons, that exception should be made for children under the minimum in the case of orphans and widows and even all poor families. When the law was drawn, Mr. Swayze was inclined to make provision for at least some of these cases. But the friends of the measure, fearful that such a section would prove a loophole for wholesale evasions, opposed that. The matter was dropped on the expectation of the charitable agencies that all cases of need would be cared for by local means.[15]

There can be no question but that any scheme for exempting children in cases of hardship would be a serious menace to the effectiveness of the whole policy. It is questionable, also, whether the desired end is best at-

[15] Mr. Swayze, in an interview with the writer.

tained by exempting such children even if done with perfect precaution against abuse. But if the matter be settled, as it is in the present law, by allowing no exemptions, there remains the problem of providing for needy cases. This problem is especially interesting here for its bearing on the administration of the policy. If the state, for the sake of the future of the children, undertakes to shut them out of employment until they have reached a certain age, there must be some means for "keeping their stomachs full" in the meantime, or else the state will find itself thwarted in the execution of its policy by an opposition somewhat in the nature of a struggle for existence. Against the urgent needs of the present, a law for securing a future benefit will not long stand. This is entirely independent of the question whether the urgent present needs in particular cases are the result of misfortune or misconduct. If opportunity is afforded to meet those needs by putting children to work, a desperate effort will be made to do so in spite of the law.

The expectation that local agencies would supply this need has not been met. Only the large towns and cities have any organized charities at all. And few of those which do have made suitable provision for this demand. Besides, the use of charities for this need is open to objections and, in any case, does not reach many whose commendable self respect of one sort leads them to seek to outwit the law rather than to obey it by asking aid of charity. There has been no attempt, moreover, to develop any form of the scholarship schemes employed in some cities or any other device to meet this situation. So it is that, regardless of questions of responsibility and culpability, the fact stands that the people of the state have, neither through local initiative nor by state action, provided any substitute for child employ-

ment, as a means of contributing to the support of the child, that is available with certainty to those whose economic condition impels them to put their children to work.

The administrative importance of this is seen in the number of people, including many in full sympathy with the main policy, who condone violations of the law in cases of hardship. This sentiment is an atmosphere extremely favorable to violation of the law. It has a more direct significance also, for it bears on notaries and even clergymen with a pressure tending to produce falsified documents, or to conceal falsification, under which children actually under age secure employment.[16] Some inspectors, too, are influenced by it. One inspector, in particular, committed himself to the writer as being indifferent to two or three months under age in specially needy cases. If this sentiment were organized, it would threaten the otherwise administrative excellency of the law at the first opportunity, unless the opponents of exemptions have an alternative proposal that meets the case.[17]

*Pertaining to Hours for Children.*—The law on hours for children is well enough drawn to meet the conditions encountered in enforcing it in factories. Ten hours has become almost universal in industries where children un-

[16] Charges of this are in the air, though are doubtless much exaggerated. The most direct testimony on the matter was the statement of a leader among the Italians in a manufacturing section. He said, in an interview with the writer, that Italian parents often come to him asking him to influence the priest to give a false copy of the baptismal record. In a few needy cases he had done so. The total number of such cases, however, is probably not large. A more serious leak is by way of the notaries who disregard alterations in documents of birth.

[17] This matter has received bare recognition in a sentence in the report of the Department of Labor for 1909, p. 4.

der sixteen are employed. When a longer day is worked, as in some textile mills, the excess over ten hours is so small that children can be dismissed at the end of ten hours without important interference with the running of the plant for the remaining time. An eight hour day for children in a ten hour day for the rest of the force, would require more specific limits of the time within which the eight hours should be worked. But there is now no opportunity for evasion of the law in the manner practiced where the day for children is much shorter than that usual for the adults with whom they work. This is not so true in the application to mercantile employment. Employment of children is forbidden between seven o'clock in the evening and seven o'clock in the morning. But many smaller stores are open all of the time between the stated seven in the morning and seven in the evening, which affords a period of twelve hours, less one meal time, within which the ten hours may be required.

A restriction upon hours meets peculiar difficulties of enforcement in that more reliance must be placed upon the testimony of employees in conducting prosecutions. and yet, employees are under pressure to shield the employer out of fear for their positions.

*Pertaining to Health and Safety.*—The sections pertaining to the health and safety of children are not very strong. An inspector can tell whether a factory is whitewashed or clean, but it is difficult to see how any line can be kept on the employment of children at cleaning moving machinery or at work in dangerous positions with machinery. If it is done continuously, there is a risk of its coming to the attention of the inspector. But if it is intermittent, as much of it is, the inspectors may never discover it. The children, or other employees, will hard-

ly complain of it or even testify to it for fear of their positions. The law would be much more effective for its purpose if it specified certain dangerous and unhealthful occupations from which children should be excluded altogether. This has been recommended by the commissioner of labor.[18]

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[11] *Message Gov. Abbett,* 1885, p. 28.

# A Settled Policy: Enforcement.

## CHAPTER VII.

### PROVISION FOR ENFORCEMENT

Thus far the account has been of the development of the ideals of the state concerning its child employees and of the increased precision with which the standard has been prescribed in the law. But experience has everywhere shown that special administrative officers are necessary to secure an observance of child labor laws, however well they may be drawn. It now becomes necessary to follow the growth in efficiency of the administrative department through which New Jersey has sought to give effect to her resolutions on child labor.

*Growth of a Corps of Inspectors: The Act of 1883.*— In New Jersey provision was first made for such officers in 1883 in connection with the child labor law of that year. That measure required the Governor to appoint, with the approval of the Senate, some person "as inspector" for a term of three years and a salary of $1200. For authority and instructions as to duty he was "empowered to visit and inspect, at all reasonable hours and as often as practicable, the factories, workshops, mines, and other establishments in the state where the manufacture or sale[1] of any goods is carried on." It was also made his duty "to enforce the provisions of this act and prosecute all violations."[2] He was limited in the expense he might incur to $500 a year.[3]

[1] This is probably a mistake. The bill originally applied to children in mercantile employments as well as manufacturing. But it was amended so as to exclude the former. The inspector then had no occasion to inspect mercantile establishments.

[2] *Pub. Laws*, 1883, pp. 59-61, sec. 5.

[3] *Ibid*, sec. 6.

The most commendable feature in this is that it recognized the need of a state officer to enforce factory laws and provided for his appointment. This is worth remarking when it is recollected how the measures vacillated, in the agitation leading up to the act of 1883, between the principle of centralized responsibility and that of local responsibility for the enforcement of such legislation, and how the legislature amended the vigor out of all thoroughgoing bills brought before it. And yet there were serious weaknesses in this initial provision for factory inspection.

Concerning form rather than efficiency, was the failure to give the inspector any official title by which he might be known. Of more weighty import was the insufficiency of the number of inspectors. According to the census of 1880 there were 7128 manufacturing establishments employing 126,038 persons, of whom 12,152 were under sixteen years of age.[4] One inspector could not possibly enforce the law over that field. The act was deficient, further, in not granting to the inspector the powers needed to secure observance of the law. He was authorized to visit and inspect factories, but he was not given any badge of that authority to secure his admission and no penalty was put upon those employers who refused to admit him.[5] Finally he had no authority to discharge a child found illegally employed. He could only bring prosecution upon the employer or the parent. And that, it was shown, was well nigh impossible to carry through successfully.

*The Enlargement of the Corps.*—The inspector at once

[4] Tenth Census. *Mfrs.* Vol. II, p. 151.

[5] The inspector reports that employers as a rule met him courteously and afforded him every opportunity to make his inspections, but that in some cases he was not recognized. *Rept.* 1884, p. 21.

urged the appointment of two assistants,[6] the need of whom was recognized.[7] A bill was introduced into the Senate in 1884. This gave the inspector the title of Inspector of Factories and Workshops and provided for two deputy inspectors to be appointed by him at salaries of $1000, but without any specified term.[8] Owing to the extreme partisanship of the Governor toward appointed officials, the bill as enacted, while making the inspector's appointments subject to the approval of the Governor and the Comptroller, limited the terms of the two deputies to February first of the following year.[9] The deputies were given the same powers as the inspector, but were made subject to his control and direction.[10] The terms of these two deputies expired during the legislative session of 1885. It was expected that the legislature would make provision to meet this. Governor Abbett, in his message, remarked on the need and even recommended that more than two deputies be provided.[11] But a recommendation from a Democratic governor to increase the appointive offices was ill received by the legislature, now Republican in both branches and rankling under this Governor's extreme partisanship in

[6] *Rept.* 1883, p. 8.

[7] *Newark Daily Advertiser,* Mar. 5, 1884, editorial.

[8] Senate Bill 2, 1884.

[9] The Governor had followed, according to announcement, an extremely partisan program with reference to the civil service. He deliberately displaced office holders that he might make room for men of his own party. This fact caused to hesitate even those who recognized the need of more inspectors. See *Newark Daily Advertiser,* Jan. 21, 1884, on the recommendation of the factory inspector. The Governor did not have a united legislature behind him in 1884. The House was Democratic, as he was, but the Senate was Republican and stood in the way of creating any more offices for the Governor to fill.

[10] *Pub. Laws,* 1884, p. 200.

[11] *Message Gov. Abbett,* 1885, p. 28.

the disposal of the patronage. However, two bills were introduced. One in the House, fathered by the leaders of that body, gave the control of the appointments to the legislature.[12] The other in the Senate, put forward by the Federation of Trades and Labor Unions, was like the temporary measure of 1884, except that it provided for three deputies for terms of three years each.[13] The Federation got its measure through the Senate and the leaders of the House passed their measure through that branch. But neither bill could pass both houses.[14] So the session closed with nothing done.

[12] House Bill 273, 1885.

[13] Senate Bill 62, 1885.

[14] The committee of the House having the bills under consideration thought the labor leaders were trying to have offices created for themselves. Besides, they argued that three inspectors, as proposed in the Senate bill, were not enough to meet the needs. The committee took occasion to explain its position in a reply to a resolution of the legislative committee of the Federation of Trades and Labor Unions calling for the rejection of the House bill and the passage of the Senate bill. *Min. House of Assem.*, pp. 810-11.

The bill in the House was a product of the political contest for the patronage between the Democratic Governor and the Republican legislature. A number of bills transferring the appointments from the Governor to the joint session of the legislature, were passed that year, though always over the Governor's veto. This bill grouped the work of inspection, the work of the Bureau of Statistics, and the making of investigations in the field of charities and corrections under a "State Council of Labor, Charities, and Corrections," to be composed of certain officials *ex officio* and "four discreet persons" elected by the legislature. The work of inspection was placed in the hands of an inspector to be elected by the legislature and as many assistants as the council of labor and so forth thought best to provide. The Federation of Trades and Labor Unions, however, would have none of this "lunatic labor bill", but introduced their own measure into the Senate. This empowered the inspector to appoint, with the approval of the Governor and Comptroller, three deputies, one to be from the southern part of the state, and not more than two to be from

In his next report[15] the inspector complained of the impossibility of performing the duties alone, especially since the legislature had added to the work by passing the first general factory law, which was given to the inspector for enforcement. This time the legislature met his appeal. Again each house had its bill.[16] but the one originating in the Senate was the one to pass. It empowered the inspector to appoint, with the approval of the Governor and Comptroller, three deputy inspectors for terms of one year[17] at salaries of $1000. They were given the same powers as the chief, but were to be under his control and direction.[18] After one year's experience, a still larger force was asked for, and received the recommendation of Governor Abbett in his last message.[19] A bill to that purpose was introduced into the Senate by Senator Griggs, later governor and United States attorney-general.[20] But the bill was all cut away by amendments until there remained only section 2, raising to $2000 the limit on the expenses of inspectors which, by the act of 1884, had been raised to $1000. This was

the same party. Their terms were to be for three years and their salaries $1000. The Secretary of State was required to give the inspector and deputies certificates of their authority. It was made illegal to impersonate an inspector, to forge his certificates, or to hinder him at his work or conceal any child from examination by him. And these were to be enforced with suitable penalties.

[15] *Rept.* 1885, pp. 9, 20.

[16] House Bill 399; Senate Bill 38.

[17] In the original bill, three years. The change was for the political reasons already named. Governor Abbett's term would expire in a year.

[18] *Pub. Laws,* 1886, pp. 106-7.

[19] *Message Gov. Abbett,* 1887, p. 30.

[20] Senate Bill 63, 1887. This provided five inspectors for terms of two years each, one deputy to be a sanitary inspector appointed by the state board of health. Other details were designed to improve the quality of the work of the department.

passed.[21] In the following year the same bill was again introduced minus the provision for a sanitary inspector.[22] But it failed to make headway.

In 1889, the legislature was Democratic in both branches, and the Governor was of the same party. The political jealousies of the opposite party thus had no foothold to oppose the creation of new offices. In this situation a new inspection bill had a clear field and became the law of 1889.[23] By this act the Governor alone was authorized to appoint six deputy inspectors for terms of three years at salaries of $1000. These were to have the same powers as the chief inspector, but were to be at all times governed by and subject to the control of him. At the same time the term of the chief inspector was lengthened to five years and his salary increased to $2500. This force, which at the time appeared to the inspector to be sufficient,[24] was continued until 1904.

When the agitation over child labor, which led up to the act of 1904, brought its renovation of the inspection department, it was seen that the number of inspectors was inadequate for the work which had been given them to do. The act of 1904 accordingly provided for eleven deputy inspectors besides the commissioner of labor and the assistant commissioner.[25] It was also provided that, when necessary for the work, the commissioner might employ additional inspectors for such time and such compensation as he may deem fit. A further extension of the jurisdiction of the department raised the question of a still larger force.[26] This was provided in 1908 by the

[21] *Pub. Laws*, 1887, p. 144.

[22] House Bill 92, 1888.

[23] *Pub. Laws*, 1889, pp. 157-8.

[24] *Rept.* 1889, p. 5.

[25] Sec. 45.

[26] *Message Gov. Stokes*, 1907, p. 11; *N. J. Rev. Char. and Cor.*, VII, 16, Jan. 1908.

addition of two deputy inspectors,[27] which raised the number specifically authorized to thirteen. Under the provision for extra assistance the commissioner of labor has appointed an additional inspector for special work in the Newark district.

*Appointment and Removal.*—In all but one of these measures, proposed or enacted, for enlarging the force of inspectors, the appointment of the chief inspector rested with the Governor and the Senate.[28] The absence of any power to discharge a chief inspector except by impeachment, and the passage of the act in 1902 giving the Governor that power, have been noted already. But the act of 1904 omitted any such authority to the Governor and left the matter where it was before the act of 1902. The present Governor, Mr. Fort, has sought to have the power of removal of several state officers conferred upon the chief executive, but the legislature has thus far refused it.

In the case of the deputies, the bill of 1884 placed the appointing power with the inspector alone, but the act as passed required his appointments to be approved by the Governor and Comptroller. This lodgment of the appointing power was retained in every bill and act, except one in 1885, down to 1889. This tended to a concentration upon the chief of the responsibility for the work of the department, for he had the initiative in selecting the assistants he had to use. The act of 1889,

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[27] *Pub. Laws,* 1908, pp. 573-4.

[28] It was proposed in 1894 that the appointment of both chief and deputies be taken from the Governor and vested in the legislature in joint meeting. (House Bill 480, 1894.) This probably had its origin in the deadlock between the Democratic Governor and the Republican legislature over the appointment of a chief inspector for the new term beginning that year. (See below, page 142.) This bill, however, did not pass.

however, denied him even an advisory influence in the choosing of his assistants. This, probably in the interest of party control, tended toward the dissipation of responsibility. When it is noted also that the deputies were given from the first the same powers as the chief,—that is, they could make discharges and issue orders on their own initiative,—it is clear that all the elements were then present for disorganization and resulting ineffectiveness in the work of enforcing the law. The act of 1889 also gave the inspector power to discharge a deputy for cause, but only with the consent of the Governor. This limitation practically took away altogether the use of that power as against any political influence that might be injuring the organization of his force, unless the Governor happened to be a man unusually willing and unusually free to disregard political influences. Of course the chief inspector himself might be too considerate of such influences. But what is here in question is the possibility, under the law, of holding him alone responsible for the work of his force. When the quality of the work of inspection is examined, the effect of this feature in the law is noticeable. This provision is continued in the act of 1904 which vests the appointment of deputies in the Governor alone. The present commissioner of labor has, in fact, an influence with the Governor in the selection of deputies, but this must always be at the discretion of the Governor and "subject to political necessities."

*Salaries.*—The matter of salaries for inspectors was early recognized as important for the character of the work that would be done, through its bearing on the quality of men available for the positions. The salary of the chief inspector was originally $1200. In 1886 it was raised to $1800 and in 1889 to $2500, where it

was left by the act of 1904.[28a] The salary of deputies had been $1000 annually from the beginning. In 1890 it was proposed to raise this to $1200.[29] But popular interest in efficient service was not so great but that fear of disapproval of apparent extravagance checked this effort. The salary of deputies remained the same for the nearly doubled force provided in the act of 1904. In 1907 the situation was changed. In that year the salaries were raised to $1500. That of the commissioner of labor, which had been placed at $2500 in the act of 1904, was raised to $3500 and that of the assistant commissioner from $1500 to $2000.[30]

*Provision for Women Inspectors.*—It was early believed that much of the work of inspectors could be better done by women than by men. Accordingly women have been attached to the inspection departments sooner or later everywhere. In New Jersey the Federation of Trades and Labor Unions began the agitation for women inspectors in 1898. That year the Federation introduced a bill increasing the number of inspectors to eight and requiring that two of them be women.[31] This was in effect to add two women to the force. The bill passed the House[32] but not the Senate. The opposition was based on the additional expenditure of $2000 a year for salaries. Acting-Governor Voorhees opposed it for the same reason and for fear of criticism for making

[28a] The delegation mentioned above, pp. 75; 82, note 53, asked the Governor that the salary be put at $5000, saying that manufacturers of the state did not want to be put at the mercy of a cheap official.

[29] House Bill 436, 1890.

[30] *Pub. Laws,* 1907, pp. 649-52. The original bill increased the salaries only for the deputies and the assistant commissioner, the former to $1500 and the latter to $1800.

[31] House Bill 87, 1898.

[32] *Min. House of Assem.,* 1898, p. 168.

more offices.[33] It may be suspected that the political impotence of women appointees was also a consideration. Every year thereafter the same bill, and sometimes others, was sent in.[34] In 1899 many petitions were laid before the Senate in behalf of the measure.[35] The New Jersey Consumers' League, organized in 1900, circulated petitions to now Governor Voohees praying that, when he made the appointments of deputy inspectors in 1901, he appoint one woman.[36] There was nothing in the law to forbid that. But all this availed not. In 1902 the proposal came before the legislature again; this time with success. But the bill which was introduced and passed simply amended the act of 1889 so as to provide for seven deputies, instead of six, and so as to refer to the deputies as "he or she" and "him or her."[37] This did not require that the additional appointee be a woman, but it permitted that; and it was generally understood that the intention of the bill was to provide for a woman inspec-

[33] *N. J. Fed. Trades and Lab. Unions*, 1898, pp. 33-35.

[34] House Bills 119, 1899; 119, and 319, 1900; Senate Bill 135, 1900; House Bills 9 and 45, 1901; 33, 1902.

[35] *Senate Journal*, 1899, p. 215.

[36] "This petition was sent to the women's clubs, to the W. C. T. U. organizations, to ministers, and to individuals of influence and prominence, who secured signatures of persons in their own localities. It was circulated widely throughout the state." (Mrs. G. W. B. Cushing, president of the League.)

[37] *Pub. Laws*, 1902, pp. 799-800.

It was reported that when the bill was taken to Trenton, it specifically provided that the new deputy should be a woman, but that Governor Murphy let it be known to his friends among the lawmakers that he would under no circumstances approve such a bill, and that the bill was therefore changed so as to make the appointment permissive instead of mandatory. *Newark Evening News*, Aug. 28, 1902, Editorial.

According to reports, it would appear that the Governor hesitated at first to sign even this bill. *Newark Evening News*, Aug. 23, 1902.

tor.[38] But even this sort of side door entrance did not open. The Consumers' League presented a candidate for the position and the labor organizations presented a candidate. Others also were in the field. The Governor was beset with the exhortations of the friends of these candidates. Finally, he said, by his secretary, Mr. Swayze, in reply to one such letter, that he did not then intend to appoint an inspector, because he did not feel that the necessity for another was yet clear enough to justify the expense.[39] This greatly disappointed the supporters of the bill of 1902, but met the approval of some.[40] In the course of the investigation of child labor, conducted by Mr. Swayze, in the fall and winter of 1903-1904, there was revealed the peculiar need of a woman to do some of the work of the department. Governor Murphy, therefore, appointed the first woman inspector, who assumed her duties February 1, 1904. For similar reasons, Mr. Swayze, when preparing the bill of 1904, included the requirement that two of the eleven inspectors should be women.

There was soon expressed a feeling that there was need of a third woman on the staff.[41] This desire profited by the growing need of more inspectors. In 1908 the Consumers' League was the originator of the bill

[38] *N. J. Rev. of Char. and Cor.*, I, p. 81, May, 1902, editorially; H. J. Gottlob, chairman of legislative committee of the N. J. Fed. of Trades and Lab. Unions, in same issue, p. 74; *Newark Evening News*, Aug. 28, 1902, editorially; and testimony to the writer by persons who were interested in the bill.

[39] Letter to Mr. J. P. McDonnell by Mr. Swayze. See the *Daily State Gazette*, Aug. 27, 1902.

[40] *Newark Evening News*, Aug. 28, 1902; *Trenton True American*, Aug. 28, 1902; *Daily State Gazette*, Aug. 28, 1902.

[41] The Essex Trades Council urged an additional woman for Essex County alone, which contains the densely manufacturing center of Newark and its environs. *Newark Advertiser*, Feb. 3, 1906.

adding two inspectors to the force and including the provision that one of the new appointees should be a woman. This was passed, thus increasing the number of women inspectors to three.[42]

*Jurisdiction of the Inspectors.*—Any judgment of the sufficiency of the number of inspectors must consider the amount of the work of the inspectors. That leads to the subject of the jurisdiction of the department of inspection. The act of 1883 first establishing the department required of the inspector to "visit and inspect" factories and "to enforce the provision of this act." As that applied only to child labor, the duties of the inspector were not varied, although they were more than ample for one man. The act of 1884, providing for two deputy inspectors, made it the duty of the department to enforce all laws relating to the "sanitary condition of factories and workshops, and to the employment, safety, protection, and compulsory attendance at school of minors; and to institute all suits or actions in the name of the inspector."[44] Under this direction, the inspector found nine different laws which he considered to fall within his jurisdiction and to which he called the attention of those to whom he sent his notices.[45] But some of these were included only by stretching the terms of the law's instructions to inspectors.[46]

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[42] *Pub. Laws,* 1908, p. 573-4.

[44] Sec. 1.

[45] *Rept. Insp. Fact.,* 1884, p. 9.

[46] The inspector's list included an act to protect children from neglect, an act forbidding the employment of children in mendicant and exhibition activities, an act to punish cruelty to children, and an act forbidding the sale of cigarettes or tobacco to minors. One of the laws properly coming under the terms of the instructions was the compulsory attendance act of 1874, but it may be questioned whether the intention was not to apply merely to the attendance required of working children under fifteen years old.

The factory acts of 1885 and 1887 added to the jurisdiction of the inspectors the enforcement of all the provisions for protecting the health, safety, and comfort of factory employees, male and female. The jurisdiction over fire escapes was disputed. The child labor law of 1883 applied to mining, hence the inspector was required to inspect mines with reference to child workers, but he was not given jurisdiction over other features of mining operations. In 1892 a commissioner of mines was provided for, after some intermittent agitation to that end.[47] But this law was repealed in 1894 and the duties placed upon the factory inspector.[48] Thus it remained until 1904, when the duties were omitted from those given to the new Department of Labor.[49]

In 1899 was passed an act requiring wages to be paid in money every two weeks. The enforcement of this law was put upon the factory inspectors.[50] By an amendment of 1904, the new Department of Labor created that year was charged with the enforcement thereafter.

In 1896 a bakeshop law was passed for the sanitary regulation of bakeries.[51] The enforcement of this law

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At any rate, the enactment of a compulsory attendance law in 1885, placed the enforcement of that act with local truant officers and thereby removed it from the inspectors.

[47] *Pub. Laws,* 1892, pp. 37-9. A bill had been proposed as early as 1886, House Bill 186.

[48] *Pub. Laws,* 1894, pp. 64-7.

[49] Mr. Swayze opposed the inclusion of this function in the new law because the work of mine inspection required an expert in mining, which no inspector on a salary of $1000 was likely to be. He thought a separate law could better make that provision. The labor leaders, for their part, were satisfied because mining is not important in New Jersey. (*Hoboken Observer,* Feb. 9, 1904.) No law has since been passed and appears not to have been demanded.

[50] *Pub. Laws,* 1899, p. 69.

[51] *Ibid.,* 1896, p. 266.

was placed upon the factory inspectors. When the act of 1904 was prepared, the bakeshops were omitted from the jurisdiction of the Department of Labor both because of a doubt of the constitutionality of placing such a provision in a factory law, and because of the want of any direct relation between factory inspection and the public health as affected by the preparation of food. But in 1905, a revision of the bakeshop law placed this duty again upon the inspectors.[52] This anomalous arrangement is due probably to the urgent desire of the bakery workers who feared the law would not be enforced otherwise. Yet the commissioner of labor urged the proposal himself.[53]

*Powers of Inspectors: Power to Enter Factories.*— The inspectors have not always enjoyed sufficient powers to enable them to compel an observance of the law they have been supposed to enforce. This question of power is complicated by that of proper safeguards upon the abuse of the power. It has been fear of this abuse, as much as opposition to the policy involved, that has retarded the development of ample powers for the inspectors. Even yet the problem of administrative arrangements that will make the inspectors real enforcers of the law without resulting in unreasonable arbitrariness is not satisfactorily solved.

The original act providing for an inspector, the child labor law of 1883, was remiss in the important matter

[52] *Pub. Laws,* 1905, pp. 203-6.

[53] *Rept. Dept. of Labor,* 1904, p. 9.

This arrangement has been criticised as disturbing to the work of factory inspection because of its distracting demands upon the inspectors. But motives of economy will probably continue it for some time. The only other available disposal is to give the enforcement of the law to local boards of health. But that would create as uneven an observance of the law as is now had by the compulsory attendance law.

of legal authority to enter factories for inspection. The inspector was required to make inspections, but was not specifically authorized to enter factories. Nor was he provided with any badge or certificate of his office. The need was met in 1886 by the act which added three deputy inspectors.[54] This law provided for a certificate of authority from the Secretary of State. It also made it illegal to impersonate an inspector or to hinder him in the discharge of his duties or to conceal any children from his examination. And penalties were provided to give these directions effect. These powers were retained in the act of 1904, which also specifically conferred upon the inspectors the right to enter and inspect establishments at all reasonable hours.[55] This power has been finally passed upon by the courts.[56]

As affecting the inspectors' opportunity to inspect factories, although not pertaining to their powers, is the requirement that manufacturers report to the inspector the location of their establishments when they occupy them. A provision to that end was included in the factory bill of 1885,[57] but it was stricken out before passage. The same provision was before the legislature in 1886,[58] but was again rejected. In 1887 it was included and retained in the factory bill passed that year. This required every person, within one month after occupancy, to notify one of the factory inspectors of his occupancy.[59] The act of 1904 requires the same notice to be sent to the department at Trenton.[60]

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[54] *Pub. Laws,* 1886, pp. 106-7, secs. 2-5. One of the bills which failed to pass in the legislature of 1885 had provisions to remedy this. Senate Bill 62, 1885.

[55] Sec. 45. [56] See above, page 93.

[57] House Bill 154, sec. 3.

[58] House Bill 218, sec. 2.

[59] *Pub. Laws,* 1887, p. 243, sec. 1.

[60] Sec. 29.

*Power to Discharge Children.*—The act of 1883 applied only to child employment. But, besides the lack of authority to enter factories, the inspector was not given power to exercise his authority in that limited field. He was authorized only to prosecute offending employers or parents, but not to discharge a child found employed under age. An attempt was made to correct that in the act of 1884. That measure gave the inspector authority to discharge forthwith any child found employed under a false affidavit.[61] It would have been ample but for the insufficient requirement of the law as to the evidence of a child's age. The burden of proof was on the inspector. And proof was in many cases so difficult that his power to discharge could not be brought to bear upon many children whose employment he was morally certain was illegal. These provisions of the law, however, remained unchanged until the enactment of 1904. In that year, the burden of proving a child's age being shifted to the parent, the commissioner was empowered to discharge any child who can not prove himself to be of legal age within five days, as well as any who may be shown to be under age.[62] This authority has proved adequate. But it should be noted that the authority to discharge a child or issue any other order, except one to furnish proof of age or a certificate of physical fitness, is expressly conferred upon the commissioner alone. The inspectors merely report the facts as they find them and make recommendations. This is an important improvement over the old law.

*Required Attention to Duty.*—Much demoralization has been caused to the work of the department of inspection by the demands upon the inspectors of other business

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[61] Sec. 5.

[62] See above, pp. 81-2.

interests. This and other influences caused them to give only part of their time to their duties. Such looseness in the inspection department did not pass without a protest, though the most urgent protestants, until the very end of the period, were the labor organizations. The unsuccessful measure before the legislature in 1887, for enlarging the force of inspectors, contained a section requiring each inspector to give at least eight hours a day to his work.[63]

After repeated efforts to get such a provision through the legislature,[64] it was incorporated in the act of 1902 which made way indirectly for a woman inspector. By this the deputies were required to give to their work eight hours a day, but only four on Saturdays. They were forbidden to engage in any business or employment that would prevent the full and faithful performance of their duties. Violation of this was to incur immediate suspension and loss of pay for such a period as the chief might deem proper, and even discharge with the consent of the Governor.[65] The act of 1904 incorporated the same reqnirement as to hours of service and as to non-participation in other distracting business.[66] The deputies at present appear to be held to this very generally. Only one clear instance came to the attention of the writer where the deputy, from his own account of his work, may be suspected of neglecting his duties on account of other business.

There is, however, plenty of political activity in some cases, although none of the deputies with whom the writer came in contact appeared to be letting his work

[63] Senate Bill 63, 1887, sec. 4.

[64] House Bill 92, 1888; House Bill 119, 1899; House Bill 119, 1900; House Bill 9, 1901.

[65] *Pub Laws,* 1902, pp. 799-800, sec. 2.

[66] Sec. 45.

suffer conspicuously on that account; and the one apparently most active in local politics has a very excellent record as an inspector.

This matter is difficult to control, in view of the conditions affecting the appointment and tenure of the inspectors. The one conspicuous delinquent noted by the writer justified himself on the plea that his position was a political one and very uncertain as to its renewal, so that he felt compelled to "put an anchor out to windward." While this does not justify a man's acceptance of $1500 a year without due return of service, the argument has as a matter of fact much practical importance. Until appointment can be conditioned solely on qualifications and tenure on efficiency of record, the deputies will be bound by human nature to spend some of their time in providing insurance against the evil day. Nothing but the intense and sensitive interest of the people of the state in the subject of child labor could have enabled the present régime to free itself as much as it has of the demoralizing influence from this source.

*Poltics and Personnel: The Chief Inspector.*—Governor Ludlow in 1883 first nominated to the new office of inspector of factories Mr. Richard Dowdell of Essex County. The nominee was an active leader in the labor unions of the day. The Senate, however, rejected the nomination on the ground that it was unfair to the manufacturers to put into such an office a man who represented the extreme labor union element.[67] The Governor then selected Mr. Lawrence T. Fell, a hat manufacturer and real estate dealer of Essex County. This nomination was approved by the Senate. Although a manufacturer, the inspector showed himself to be much in sympathy with

[67] *Newark Daily Journal,* Mar. 22, 1883, Editorial; *Newark Daily Advertiser,* Mar. 23, 1883.

the labor unions, to whom he gave much credit for the law and for assistance to him in enforcing it.[68] He also chose his first deputies from trade unionists. Yet he does not appear to have carried his sympathies to the extent of giving offense to manufacturers on that account. He was something of a politician, also, without any doubt.[69] Probably his selection for the office was influenced by that fact. Yet he denied that he made application for the office or in any way sought the appointment. However that may be, he showed a great deal of sympathy and enthusiasm for the object of the laws under his jurisdiction and appears to have made an earnest endeavor to enforce them throughout his official career.[70] He has left a record which appears to be a good one. According to testimony given the writer by two inspectors who served under him, he followed up the work of each deputy with critical scrutiny and exacted faithful performance of duty from them, so far as he had power to do so. Yet he did not escape criticism. His renomination in 1886 was adversely reported by the senate committee and was confirmed only after some delay by a small majority.[71] But that was doubtless due to the fact that the Senate was Republican while he and the governor who renominated him were Democrats. In 1889 his renomination was

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[68] See. *Repts. Insp. Fact., passim.*

[69] He was at one time, during his inspectorship, Mayor of Orange. After his appointment he was charged with earlier political dealing and with having sought to influence legislation affecting his office. All of this he denied. Letter by "Rex Hatter," dated Mar. 1, 1884, in *Newark Daily Advertiser*, Mar. 3, 1884. Reply by Inspector Fell, dated Mar. 4, 1884, in *Newark Daily Advertiser*, Mar. 5, 1884.

[70] This has appeared in the accounts of the enactment of the various laws during the early years of his official career.

[71] *Senate Journal*, p. 897.

confirmed unanimously by a Senate with a Democratic majority of only one.[72]

At the expiration of the first five-year term in 1894, his renomination was stoutly opposed. Whether this was due in any part to his attempt to give the fifty-five hour law of 1892 the vigor of judicial approval and then enforce it, the writer has not discovered. But probably politics had a large part in it. Inspector Fell had held office for eleven years. It was time to "give some one else a chance." The Senate was now Republican by a majority of one, so could defeat the renomination by the Democratic Governor Werts. The nomination was referred to committee,[73] but no report was made or other action taken. In 1895, Governor Werts renewed his nomination of Mr. Fell. This year the Senate was Republican by sixteen to five. The term of Governor Werts would expire in a year. The trend of political sentiment was toward the Republican party, so a further delay of a year might find a Republican governor in office. The nomination was accordingly rejected by a party vote.[74] Governor Werts did not nominate anyone else. Meanwhile Mr. Fell held over, but, of course, was not as aggressive on such an uncertain tenure. When the legislature met in 1896, the Republican Governor Griggs had been elected and the Senate was Republican by eighteen to three. This was the first Republican governor since the inspectorship was established. The event was, therefore, a signal for a redistribution of patronage. Senator John C. Ward, a farmer of Salem County, whose senatorial term was about to expire, was nominated by Governor Griggs and promptly approved by the Senate.[75] Inspec-

[72] *Senate Journal*, p. 887.

[73] *Ibid.*, 1894, p. 905.

[74] *Ibid.*, 1895, p. 947. The vote was 15 to 5.

[75] *Ibid.*, 1896, p. 893.

tor Ward held the office until the revulsion of sentiment forced him out in 1904 and reorganized the department under a new law.

Inspector Ward was the opposite in many respects of Mr. Fell. He was an easy-going official, without any aggressiveness. He had none of the enthusiasm for the factory laws displayed by Mr. Fell. He had no intimate knowledge of factory life or factory conditions, having come from a farming county, in the south of the state, where the only manufacture of importance was the glass industry. His selection was made almost entirely on grounds of political expediency. The administration of the department under him became thoroughly involved in the game of politics and showed no vigor at any time. Mr. Ward was severely criticised as purposely relaxing the enforcement of the law for the sake of employers who wished to violate it. It appears rather that he was not reactionary in his purpose, but too easily misled as to the actual observance and too solicitous about political consequences. His outgoing from office and the appointment of Mr. Bryant have been already described.[76]

The selection of Mr. Bryant appears to have been independent of political influence. He was not known to be a candidate for the place and his name had never been mentioned in connection with it. Governor Murphy is reported to have said "I have selected Colonel Bryant for this position entirely because of my personal knowledge of the man . . . . I shall give Colonel Bryant a free hand in the management of his department, especially in the selection of his subordinates, and shall only demand that the work so well begun by Mr.

[76] See above, pp. 63 *et seq.*

Swayze shall be carried to a successful completion."[77] At least one candidate of the politicians of South Jersey was passed over in this appointment.[78] This was in accord with the declaration in his annual message that "above all, the head of this important department should be in perfect sympathy with the views of the people of the state."[79]

Mr. Bryant was in the hotel business, the irrelevancy of which to the work of factory inspection was made the point of some critical humor, especially as Mr. Ward had been criticised because, never having been anything but a farmer, he could not be expected to direct the inspection of factories understandingly. But Mr. Bryant's recommendation came from another source. He had been educated in a military academy, had served in the Spanish war as captain of a company in a regiment of New Jersey volunteers, had then served as assistant inspector-general in the New Jersey National Guard, in which position he was acknowledged to have made an excellent record for efficiency, and was at the time of his appointment secretary of the New Jersey Commission to the Louisiana Purchase Exposition. Although these were political offices, he seems to have given them more than the time-service of the politician and to have shown a capacity for organization and an integrity such as were needed in the work of directing the factory inspection. At any rate, the appointment was favorably noted by the newspapers, and the work of the department under his direction has found equal favor.

*The Deputy Inspectors.*—The office of deputy inspec-

[77] *Newark Daily Advertiser*, Jan. 8, 1904; Also *Daily State Gazette*, Jan. 11, 1904.

[78] *Daily State Gazette*, Jan. 7, 1904.

[79] *Message*, 1904, p. 13.

tor was treated as a reward for political service. This is generally acknowledged, although in the nature of the case the exact details and reasons for changes on that account are difficult to ascertain with certainty. The following table presents a scheme of the changes of the deputies. Each space on a horizontal line represents a year. These are grouped into three-year periods corresponding to the terms of the several governors. The political faith of the governors is indicated by D for Democratic and R for Republican. The years are indicated by the last two figures of the number, beginning with 1883. The incumbency of the chief inspectors is indicated by their names placed at the beginning of their official careers. The different inspectors are indicated by different letters placed under the year of their appointment. Their terms of office respectively are indicated by the number of spaces after the letter until the next one. From 1887 to 1904, each horizontal line represents one office and the number of letters in the line the number of different inspectors who have held that appointment. In 1904 the districts were reorganized so that none of the inspectorships are identical with those preceding 1904.

## TABLE V.

CHANGES OF INSPECTORS.

| D | D | D | D | D | R | R | R |
|---|---|---|---|---|---|---|---|
| '83 | '84–'86 | '87–'89 | '90–'92 | '93–'95 | '96–'98 | '99–'01 | '02–'04 |
| FELL | D. | . . . | . . . | . . . | WARD | R. . | . . . |
| | | C E . | . . J | . . . | . O . | . . . | . . . |
| | A | D . . | . . . | . . M | . P . | . . . | . . . |
| | B | B F . | . . . | . . . | . T . | . . V | . . . |
| | | G | . . K | . . N | . Q . | . . . | . . . |
| | | H | . . . | . . . | . R . | . . . | . . . |
| | | I | . . L | . . . | . S . | . . U | . . . |

By the diagram is shown that A and B were appointed in 1884 for the short term expiring February 1, 1885. Then came the period of two years when political jealousies prevented provision for any deputies. In 1887 three were provided for terms of one year each. Two of these were succeeded at the end of that term by other men. In 1889 came the new inspection law providing six deputies for terms of three years each. The three existing deputies, E, D, and F were reappointed with three new ones, G, H, and I. Three of these six were succeeded at the end of their terms by new appointees. One of the new and one of the old were succeeded at the end of the next term. Then came a change of administration with the appointment of chief inspector Ward and a clean sweep of the deputies. Only two further changes were made before the reorganization of

1904. In 1904 politics had its influence on the appointments, but did not determine them. Governor Murphy consulted the interests of local politicians. And it is evident that some of the appointees are active in local politics. But he insisted on getting competent and well-intentioned men. To each of them he sent a forceful letter giving him to understand that he would be held for his full duty.[80]

From 1887 to 1904 the average term of office for the deputy inspectors was 4.57 years. The time since 1904 has been too short to judge of the tenure of office.[80a] Thus far there has been a respect by politicians for the integrity of the force. But only one change of governors has been made affecting reappointments, and that did not involve a change of party. A third governor is now in office, but he is of the same political faith. He will not have the appointments to make until 1910.[80b] From his present record he is not likely to sacrifice them to politics. Whether, however, public sentiment is strong enough to enable the present composition of the force to withstand a change of politics in the administration is rather doubtful. There is a growing sentiment for a more permanent tenure in all state offices; and civil service laws have been agitated in recent years. But the politicians have thus far prevented very much of a check on their control of the patronage. In 1908 a civil service law was passed. But its provisions do not include

[80] *Trenton True American*, Sept. 3, 1904; *Newark Evening News*, Sept. 4, 1904.

[80a] Written early in 1909.

[80b] Written early in 1909. Since then, Governor Fort has reappointed Mr. Bryant, but only after some delay and after urgent requests to do so by various delegations and communications from the friends of the child labor law.

inspectors in the classified service.[81] So the department is still open to the raids of the politicians if ever a governor is elected who will give heed to them.

Labor organizations have taken an active interest in the work of inspectors. There is a wide feeling among wage earners generally that inspectors ought to be chosen from among wage earners on the ground that they are most familiar with the conditions which the law aims to improve and most interested in seeing the law enforced. This feeling has had some recognition, apparently, in selecting the inspectors. At least nine of the thirty-one men who have held such an office have been union men, and some others have been wage earners. Such selection has been confined, so far as the writer knows, to the northern half of the state.

The quality of inspectors appointed to the force under the conditions described has been of all grades from the worst conceivable to the best possible. Some of the deputies have shown a complete disregard for everything but the salary. One manufacturer interviewed said he had been threatened with blackmail prior to 1904. An employee for a long time in one of the industrial centers said the inspectors in his section long had had no respect from the workers, who even helped to conceal children from them and who refused to offer them any assistance. On the other hand there have been some who have left excellent reputations in their sections for honesty of purpose and diligence. Of the present inspectors, those concerning whom the writer has made inquiries enjoy in most cases good reputations. With eight of them the

[81] *Pub. Laws*, 1908, pp. 235-56. Among the numerous public officers excluded from the classified service are "all officers appointed by the Governor, with or without the approval of either or both branches of the legislature." As the inspectors are appointed by the Governor, they fall within this excluded class.

writer has been in contact sufficiently to form some opinion of them. Although he does not consider his association with them long enough or intimate enough to express a final judgment on their quality, his impressions may be added to the statement of their reputations. Taken as a whole they appear to average well above the usual political appointee. In only one case did the writer feel that the man was quite indifferent to his work. In two cases the writer would judge the men to be earnest and industrious, but somewhat easy for shrewd violators of the law to fool. This was said to be true of one of them by some in his district who were interviewed. The others appeared to have not only interest and pride in their work, but also a certain potential aggressiveness that is aroused by any attempt to hoodwink them. This has shown itself to the discomfiture of employers on several occasions. Yet it can hardly be said of more than two or three of them that they have that commanding interest in the law's observance and that missionary zeal for the results sought for that tend to an even carefulness to keep the work up at all times. Yet such strong devotion to duty is perhaps too much to expect from political appointees at present. The relative excellence of the force is more to be remarked upon than the absolute deficiencies.

*Administration of the Work: Organization.*—The organization of the department for inspection has gone through all stages. Until 1892 Inspector Fell had his headquarters at his place of business in Orange. After that he was established at the capitol. Since the fall of 1906, the department has maintained a branch office in Newark, which is open on certain days of the week, under the care of members of the force, for issuing the papers for working children and answering inquiries pertaining

to any part of the work of the department. This is a most valuable provision for the enforcement of the child labor law. Newark and its environs are a densely manufacturing district. The office of the department affords an opportunity for a great number of children to secure their papers under expert supervision of officials interested in having them correctly prepared. Many incorrect supplementary documents are discovered which would possibly have passed a notary unchallenged.[82] Much subsequent labor in discovering these cases is thus saved for the department. The usefulness of this office has led the department to open headquarters and office hours in other important centers of the state. By the end of 1909 offices were established in Hoboken, Paterson, Passaic, and Camden; and others were planned for Elizabeth, New Brunswick, Millville, and Bridgeton.[83]

The centralization in the chief inspector of authority over the work of the department was very limited in the early years. The several deputies had all the powers of the chief for initiating action except that no prosecution could be begun by them without the written direction of

[82] The preventive work accomplished by this office may be summarily stated in the following figures taken from the reports of the office to the commissioner of labor.

| | 1906-7 | 1907-8 | 1908-9 |
|---|---|---|---|
| Number of affidavits, with accompanying papers, issued | 2,660 | 2,289 | 2,945 |
| Number of applicants below legal age | 286 | 158 | 153 |
| Number without birth records | 398 | 194 | 228 |
| Sent abroad for proof of age | 110 | 121 | 46 |
| Falsified papers discovered | 92 | 37 | 56 |

In 52 cases in 1906-7, in 75 cases in 1907-8, and in 202 cases in 1908-9, affidavits were taken and held for lack of supplementary proof of age. These were filed for possible assistance in prosecuting any employer who might illegally employ any of the children.

[83] *Rep. Dept. of Labor,* 1909, p. 7.

the chief inspector.[84] This resulted in great lack of uniformity in the administration of the law, and subjected employers to the unqualified exactions of men of all sorts of judgment and integrity. Under the law of 1904, all action by the department must be taken by the commissioner of labor alone. The deputies have powers only of inspection and recommendation.

Another point pertaining to the chief's control over the department is the matter of reports by the inspectors. This does not appear to have been worked out until the present law. The deputies made annual reports of their work. But there was much looseness in the reporting during the year, both as to frequency and as to the content of the report. Attempts were made to improve this by legal enactment, but without success. Under the law of 1904, however, the deputies are required to report in writing at least once a week. They are furnished forms upon which to make this report, showing their work for each day of the week. Besides, separate forms are provided for reporting their findings in each establishment inspected. The commissioner is thus given frequent and detailed information on what the deputies are doing. Also, the necessity of making frequent and detailed reports stimulates the deputies to have something to put in them.

Another matter affecting organization is the division of the labor of the department. This concerns more than the inspection of child labor, but it may be noted here as indirectly revealing the system with which the inspection of child labor is done. Prior to the present law, there appears to have been no division of labor except by division of the state into districts. In each district, the deputy looked after as much or little of the law under his charge

[84] Act of 1884, sec. 1.

as he liked. But the whole of it was left to him. The proposal was made to provide a special sanitary inspector, but it did not receive support.[85] Since 1904 there has been a degree of specialization. The assistant commissioner has made a specialty of passing upon all reported needs for fire escapes. One of the deputies has made a special work of blowers or dust removing systems, throughout the state as well as looking after a district of his own. One of the inspectors is a plumber and is often used outside of his district to pass upon cases involving the installation of sanitary equipment when the commissioner is in need of expert advice. The women inspectors give their attention primarily to the interests of women employees and child labor, although the latter is a prime interest with all the inspectors.

The state has always been districted since the permanent provision for deputy inspectors in 1886. Since 1904 there have been nine districts. To each of these one of the original nine men inspectors was assigned. The two women were assigned to special work on child labor and the interests of women employees without regard to districts, except that one has worked in the southern part of the state and the other in the northern. The recent addition of one more man and woman has not yet caused any change in the districting of the state.

Formerly there does not appear to have been any systematic plan for following up orders issued by the inspectors. If a child was discharged for being under age, no check was provided upon his immediately securing employment elsewhere. If a certificate of school attendance was ordered, the inspector was left to return or not in order to see whether the certificate was secured. Likewise with orders for the betterment of factory condi-

[85] Senate Bills 63, 1887, and 191, 1891.

tions. Since 1904, the employment of a discharged child is checked up when the papers are sent to Trenton within the twenty-four hours after employment. If a child is ordered to be discharged, or if an order for betterments is made, a form accompanies the order upon which the employer reports when he has complied with the order. When this reply is received by the department, or when the time limit on the order has expired without such reply having been received, the local deputy is sent to ascertain whether the direction has been followed and, if so, whether in a satisfactory manner. If the matter needs further attention it is followed up.

Until the reorganization of the department under the present law, no adequate records of the work were kept at the central office. The department was crowded off in a corner of the state house without room for such files, even if there had been inclination to keep them. At the outset of the present régime, advice was sought from the experience of other states and a system of records, carefully planned to meet the needs of the administration of the law, was devised and has been kept up.

*The Work of the Women Inspectors.*—The work of the women inspectors greatly strengthens the department in the fields of child labor. A woman has a superior advantage in investigating doubtful cases of children. She will be better received in the home and with less suspicion, and can, therefore, discover more of the truth than the man in the same situation, especially in the case of foreigners ignorant of American ways. It was for this work that the need of women on the force was first felt and this was the work first assigned to the first woman appointed.

The women now, however, make regular inspections with chief reference to child labor and women employees.

In this work they are more criticised. They are said to be too idealistic. They want a factory kept as they would keep a parlor. They recommend orders for betterments with regard solely to the desirability of the improvement, and without regard to the cost or practicability of it to the employer concerned. They are too uncompromisingly insistent on immediate perfection. In the matter of child employment, they are swayed by sentiment and act on their woman's impulses, so as to be unjustly severe. And so forth. This doubtless has truth in it. But how far the women are judged "too much" of the character alleged and "too strict" depends on how far the critic would like to be undisturbed. It must be recorded also that most employers interviewed expressed approval of the work of the women and considered many of the results secured by them to be unattainable otherwise. On the whole the presence of the women is a good tonic to the work of the department for which their mistakes from overzealousness are not too much to pay, especially since inspectors can make no orders of their own will.

Criticism of the women comes from within the department also. They have no limit to their territory, except as the state is divided into large districts between them. They thus cut across the territory of the other inspectors. This frequently discloses a slackness by the men inspectors in keeping track of some factory or other, —a result of the women's activity not agreeable to the men. Hence some feeling by them against being "spied upon" in this manner. Yet there is a counter surveillance of the women's work by the district inspectors. This mutual checking up of work by two inspectors covering the same ground is certainly a valuable stimulus to better work by the department as a whole. The present arrange-

ment must be judged to have great administrative merit.

*Policy as to Enforcement.*—Inspector Fell, when he assumed his duties, was subjected to a demand, especially by workingmen, for a literal enforcement of all the labor laws at once. Instead, however, he adopted a policy of leniency for first offenses and for merely technical violations. This policy was repeatedly stated and defended by him.[86] Inspector Ward does not appear to have had any aggressiveness at all to his policy. Commissioner Bryant at first took somewhat the same view as did Inspector Fell, but with more firmness after the preliminary leniency. There had been felt so little force from the laws that to enforce the act of 1904 sharply and completely would have brought a sudden shock to the industries affected. The commissioner decided to take up one feature of the law at a time, get employers to understand that thoroughly and in the way of observing it, and then take up another. The age limit was the first of the child labor provisions to receive attention. Since then, the fifty-five hour week for children under sixteen has been taken up and pressed.

*Prosecutions.*—In the matter of prosecutions, Inspector Fell does not appear to have done much. His reports contain no statistics on that point, although he indicates that he did resort to prosecution.[87] Yet this was not often. He attributes it to want of necessity because of the favor with which the law was received.[88] That is a

[86] *Repts. Insp. Fact.*, 1885, p. 7; 1886, p. 8; 1893, p. 7.

[87] *Rept. Insp. Fact.*, 1887, p. 6.

[88] *Ibid.*

[89] Thus he reports in 1886, "There have been opportunities to prosecute parents and guardians. Investigation, however, showed in almost every case that the family was extremely poor. Realizing what a hardship a fine or imprisonment would be upon their dependents, I relied upon their promise of implicit obedience in the future, and dismissed the children from the factory." (P. 8.)

doubtful explanation. It is easier to think that his policy of leniency,—being a man of easy sympathies,[89]—and the difficulties of proving a case were the cause, so far as he was involved, and that indifference of the inspectors in some districts was another cause. During Inspector Ward's régime, the reports say nothing of prosecutions until 1901, when it was reported that violations of the child labor law had necessitated some prosecutions, in two of which the department was successful.[90] In the next year, he reported three successful prosecutions in all and two others pending.[91] This was most certainly due to the rising protest against his administration. That he was formerly indifferent to violations is indicated also by the testimony of earlier inspectors, who told the writer of repeated cases reported by them to no purpose.

From the advent of Mr. Swayze, and later the present Commissioner Bryant, a change in this matter at once appears. Accounts of suits became noticeably frequent in the newspapers. Under the old law, with all the difficulties upon the department of proving a child to be under age, twenty-three suits were brought in the year from October 31, 1903, to the same date in 1904, and nineteen judgments were secured,[92] out of the twenty cases then finally settled. This is illuminating testimony to what could be done even with the old law when the head of the department was resolved upon enforcing it. During the official year 1905 and 1906, thirty-two suits were brought under the new act of 1904, in which penalties were recovered in all but one of those concluded when the report was written.[93] In 1906 and 1907 twenty-two employers were prosecuted.[94] During 1907 and 1908 five suits were

[90] *Rept. Insp. Fact.*, 1901, p. 11. [91] *Ibid.*, 1902, p. 237.

[92] *Ibid.*, 1904, p. 7.

[93] *Rept. Dept. of Labor,* 1906, p. 5.

[94] *Ibid.*, 1907, p. 4.

brought.[95] During the year 1908 and 1909 suits were instituted for the illegal employment of forty children.[96] The falling off in the number of prosecutions in the year 1907 and 1908 may appear to indicate a slump in the activity of the department. But it may well be accounted for by the depression in business, which would be expected to reduce the occasion for illegal employment of children. This inference is strengthened by the coincidence of the increase of prosecutions in 1908 and 1909 with the revival of business.

*Compulsory Attendance: 1883 to 1904.*—To enforce the compulsory attendance law, it was necessary to provide sufficient accommodations, an adequate force of truant or attendance officers, and, considering the character of pupils whose attendance is compelled, provision for the segregation and appropriate handling of backward and incorrigible children. The responsibility for providing these rested upon the local school authorities. Besides this, the factory inspector was given authority to assist in the police duties. His activities may first be noted briefly.

The factory inspector, led by his own interest in the matter and by the relation between the compulsory attendance and child labor laws, as well as by his authority, took steps on his own account to stimulate localities to enforce the law. In August following the enactment of the law of 1885, he sent letters to the mayors of all New Jersey cities urging them to secure an observance of the act.[97] This he appears to have repeated, in some cases anyway.[98] More than that, he went in person before the local authorities in different cities to urge

[95] *Rept. Dept. of Labor,* 1908, p. 5.
[96] *Ibid.,* 1909, p. 8.
[97] *Rept. Insp. Fact.,* 1885, p. 35.
[98] *Ibid.,* 1887, p. 10.

them to provide the needed facilities.[99] This, be it noted, was the only centralized influence exerted upon the several communities. But it was merely an influence, for his authority went no further in that direction. How little his influence effected in the present case will be noted presently.

Turning to the activity of local authorities, the question of school accommodations was the leading one. The law on the matter has been noted.[100] The interest here is in the extent to which the necessary facilities were supplied. It was a persistent complaint that the school buildings were inadequate to accommodate all the children if attendance were required. These complaints appear in the reports of the inspector of factories and, especially, in those of the superintendent of public instruction.[101] They apply to all parts of the state. The charge, moreover, was admitted and the question of accommodations was put forward as the reason for a confessed neglect of the attendance law.[102] Yet the lack of accommodations was not always and everywhere accepted as the only reason for non-enforcement. It was frequently asserted, and illustrative examples were given, that, whether the existing buildings could accommodate all children within the compulsory age group or not, they could accommodate many more of those children than the authorities in many places were hunting up.[103]

[99] *Rept. Insp. Fact.*, 1891, p. 109.

[100] *Ibid.*, 1885, p. 35.

[101] *Ibid.*, 1886, p. 16; *Rept. Supt. Pub. Instr.*, 1886, p. 33; 1887, p. 33-34; 1891, p. 14; 1896, p. 162; 1898, p. 204; 1903, p. 114.

[102] *Rept. Insp. Fact.*, 1885, p. 35; 1887, p. 10; *Rept. Supt. Pub. Instr.*, 1885, App., p. 67; 1886, App., p. 85; 1887, p. 35; 1891, App., p. 73; 1892, App., p. 111; 1893, Part I, App., p. 76; 1896, p. 182; 1899, p. 236; 1902, p. 146; 1903, pp. 102-3.

[103] *Rept. Insp. Fact.*, 1890, p. 8; *Rept. Bur. Stat.*, 1888, p. 623; *Rept. Supt. Pub. Instr.*, 1892, p. 45; 1894, App., p. 96.

There was enough elasticity to the existing accommodations to permit a much greater observance of the law than was being secured. No inclination, moreover, has been discovered to take advantage of the law of 1899 making it possible to borrow from the state school fund for the purpose of providing accommodations.

Of the other requisites for an effective enforcement, the appointment of truancy officers proceeded very slowly. A year after the factory inspector sent out his letters to the mayors of cities, he knew of only one such officer having been appointed.[104] By 1890, he knew of only two additional cities having made the provision.[105] The following year he records a "number of additional truant officers" and "more attention" to the law.[106] From this time on more cities appointed officers to enforce the law. But it appears that these advances were only half way. The efforts of the officers were restricted in most cases to securing regular attendance by those already enrolled. In few cities was it attempted to get into school those not enrolled at all. Where this was undertaken, the number of officers was still inadequate for the purpose.[107]

The lack of attendance officers and the inadequacy of their service was chargeable in part to the grudging cooperation of the police, from whom the officers were to be drawn, as well as to the fault of school authorities. From the very first it was pleaded that the police force could not spare the men.[108] There was another bone of contention in the question as to whether the school

[104] *Rept. Insp. Fact.*, 1886, p. 14.

[105] *Ibid.*, 1890, p. 7.

[106] *Ibid.*, 1891, p. 8.

[107] *Rept. Supt. Pub. Instr.*, 1893, Pt., I, App. p. 63; 1897, p. 238; 1892, App., p. 111.

[108] *Rept. Insp. Fact.* 1885, p. 35.

officials or the police authorities should control the truant officer.[109] Finally, because of this double authority over the officer, the police department frequently did not feel responsibility for the work, which thereby came to be performed perfunctorily.[110] Thus the coöperation of the police was so far withheld as to diminish the effectiveness of the provision by the school boards, a provision usually too inadequate at best. It is not to be concluded, however, that the police were always indifferent. Cases are recorded of sympathetic and faithful coöperation with the school authorities.[111]

The provision of ungraded or truant or parental schools was almost totally neglected. Proposals to that end appear to have been considered;[112] and Newark had long had a city home for incorrigible children which was used for that purpose.[113] But otherwise the interest in the matter never could surmount the obstacle of the expense of providing space or buildings and the special teachers required. It was said at the end of the period by a leader in the charitable and philanthropic activities of the day that "there are no parental schools in New Jersey, the only persistent effort which has been made in this direction is in the city of Newark, and even in Newark very little is at present being done."[114]

Turning from the provision of the means of enforcement to their use, such provision as was made seems not to have been employed with earnestness. This will be shown in the evidence of a lax observance to be examined

[109] *Rept. Insp. Fact.*, 1893, p. 25.

[110] *Rept. Supt. Pub. Instr.*, 1902, p. 146.

[111] *Ibid.*, 1899, p. 292; 1902, p. 149; *Annual Rept. State Charities Aid Assn.*, 1900, p. 10.

[112] *Rept. Supt. Pub. Instr.*, 1899, p. 310.

[113] See above, p. 22, note 29.

[114] *Rept. State Charities Aid Assn.*, 1900, p. 13.

presently. It is also indicated in the matter of prosecutions, concerning which it has to be recorded that no specific case in all this period has come to the attention of the writer.[115] Finally, there are the confessions from the school authorities of many cities that they were not making any effort to enforce the law, or at most were only trying to keep in regular attendance those who become enrolled without much resistance.[116]

Surveying the efforts made to enforce the law, the conclusion is reached that localities made no attempt to speak of to enforce the law until after 1890; that in many places even then no attempt whatever was made to that end; that in most of those which did make some provision, the enforcement was enervated by a lack of zeal in the school officials or an indifferent support from the police; that in only a few was a worthy struggle made with the problems of enforcement; and that in no case did this measure up to the vigor and comprehensiveness necessary to solve them.

*Compulsory Attendance: Since 1904.*—The strengthening of the compulsory attendance law, begun in 1900, does not appear to have wrought much improvement in conditions until the school law was finally settled by the act of 1903. While the act of 1900 and its immediate successor, the act of 1902, were in litigation, there was hesitancy in many places about taking any steps lest they prove to be wasted if the acts should be found unconstitutional. Besides, the sentiment in behalf of children was

[115] The experience of the attendance officer in one of the largest centers of child employment may be taken as illustrative. From his appointment in 1895 to 1903, he said, he was "simply working a bluff" on offending parents and children because the magistrate would never convict anyone.

[116] *Rept. Supt. Pub. Instr.*, 1899, p. 311; 1901, p. 274; 1902, p. 132; 1904, p. 105.

not then developed. Yet there was some endeavor to apply the law. When the uncertainties had been removed by the act of 1903, public interest in children had grown in many localities to the point of pressing for an improvement in school attendance. Accordingly, from about that time newspaper accounts of attention to the law and of the provision of truancy departments become increasingly frequent. The commissioner of labor, also, remarked upon this,[117] as did also Mr. Fox in his inquiry into the operation of the child labor law in 1905.[118]

The increased activity of the school authorities appeared, in the first place, in the greater provision of truant or attendance officers to enforce the law. This was made in all sections of the state, though not in all places. Newark and Jersey City, especially, detailed a large number of men from the police force to attend to truancy and non-attendance. Yet this improvement was very unequal throughout the state and even intermittent. Many places do not even now provide anywhere nearly adequately for this work and many places have, after half-hearted advances, relapsed into inactivity. Some of the larger factory cities have only one attendance officer. In such cases the results cannot be otherwise than as found in one large child-employing center, where efforts of the sole truant officer are made only to keep the children on the rolls in regular attendance. The truant officer, who stands in excellent repute, said there were hundreds of children not attending school at all whom he could not look after. Not to leave an untrue impression of neglect, however, the splendid achievement of Newark, the largest city of the state, and of some smaller

[117] *Rept. Dept. of Labor,* 1905, p. 5; 1906, p. 5.

[118] *Annals Amer. Acad. Pol. and Soc. Sci.,* Vol. XXV.

towns should be set over against the delinquent communities.

Although the boards of education are at liberty to provide truant officers as they think best, they usually have used their right to call upon the police force for men, because this is the most economical course. The provision of truant officers has thus depended on the coöperation of the police. This, as usual, has been in most cases half-hearted. An agent of the New Jersey Consumers' League reported in 1905 that the assistance of the police seemed to be regarded as generally unsatisfactory.[119] This has been the testimony given to the writer in most cases. The reasons for this have been noted in an earlier criticism of the law in this respect.[120] Newark alone of the large cities seems to have secured an adequate detail of police officers who perform the work with care and interest. Some of the single officers who do the work unassisted in other places appear earnest and diligent, but are unable to do all the work alone.

The effectiveness of the truant officer is closely dependent upon the support he receives when a case reaches the stage where prosecution is the only resort left. In this respect the period under the present law shows marked contrast with the preceding era. Newspapers early report activity in this respect in the largest cities and in some smaller ones. In the prosecution of cases, the Society for the Prevention of Cruelty to Children has taken an active part in a few cities where it has been organized.

This greatly improved interest in the enforcement of the law is not without its opposite. Many boards of education do not push the policy to the point of prosecution. Truant officers have told the writer of repeated

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[119] *N. J. Rev. Char. and Cor.*, Vol. IV, p. 234, Dec. 1905.

[120] See above, p. 56.

recommendations to prosecute which have received no attention. Of course the offending parents continue to offend, and the officer's threats become impotent with others also. In smaller towns, especially the glass towns of southern New Jersey, the board of education often includes wage earners, who may work alongside of the man who ought to be prosecuted. One school official of a glass town put it well in saying that the members of the board were reluctant to prosecute their neighbors. It is not always a matter of neighborliness, however. In the small glass towns where the glass works is the only industry, and the population is almost entirely dependent on that factory, it is, in the natural order of things, impossible to arouse very much enthusiasm for the strict enforcement of a law which would affect the supply of boys required for the operation of the factory.[121] Then again, it has been a matter of expense. In one factory town, the justice of the peace who heard the cases brought for prosecution tempered the amount of the fines to the economic condition, as well as the deserts, of the defendant. The fines did not then aggregate enough to pay the costs. He sent the bill for the balance to the board of education. This body thereupon transferred all cases to the police justice, from whom they had been previously taken because he was too easy with offenders.

Sometimes the apathy is with the local magistrates. Indifference, sympathy, or partiality for the offending parents, and political influence have all had a part in foiling prosecutions brought by the truant officers.

Closely related to the matter of prosecutions is that of parental schools. A delinquent parent can be fined. But

[121] For an account of one factory inspector's experience with this local opposition from interest, see *N. J. Rev. Char. and Cor.*, Vol. V, p. 350-1, Jan. 1907.

if his fault is inability to control his child rather than indifference, the corrective measures of the state must reach the child directly. This often requires, for reasons before considered, that the child be segregated from the average school group and dealt with according to his special needs. This matter also was given attention. The State Council of Education of New Jersey, at its session in November, 1904, urged the provision of parental schools.[122] Newark had long had a city home for boys which it readily utilized for the treatment of truants. Elizabeth, at the urgent request of the superintendent, provided in 1905 a separate room with a special teacher for incorrigibles.[123] Hoboken, at the initiative of the woman's club, provided in 1906 for a truant class.[124] The proposal was considered in other localities as well, some of which probably carried it through in some form.

Yet even allowing for possible cases not known to the writer, the number of such rooms or schools was probably very few. At least one attempt was abandoned.[125] It is not unlikely that others were also considering the uncertain state of the public mind in many places. One obstacle was the expense. This was removed by the act of 1906 providing for county schools. But this presented a new obstacle in the difficulty of getting an agreement among the whole population of the county, for some district would feel that they would be taxed for the benefit chiefly of some other more populous district. So far as has been learned, this act has not been utilized very much yet. Another obstacle to parental schools, insup-

[122] *Camden Post-Telegram*, Nov. 15, 1904.

[123] *Elizabeth Times*, Dec. 15, 1904; *Rept. Supt. Pub. Instr.*, 1905, p. 120.

[124] *Hoboken Observer*, Jan. 26, Jan. 30, and Sept. 28, 1906.

[125] *Rept. Supt. Pub. Instr.*, 1903, p. 132; *Passaic News*, Nov. 29, 1905.

erable in some localities, is an opposition to them on principle as an unjustifiable interference with parental authority, or a cautious hesitancy on the part of some who looked favorably upon the purposes of the proposal.

Concerning accommodations, the reports of the state superintendent of public instruction contain local reports saying that the schools are able to accommodate all who apply for admission. Occasionally an admission is made that school facilities are inadequate. But in some of the places from which the favorable reports have come, the writer found the attendance law was enforced only for those on the rolls of the schools, and that the schools were crowded even at that. It appeared very doubtful whether they could accommodate all children if they were compelled to attend. One superintendent said, however, that the elasticity of a schoolroom is surprising and that room could be found if the children were brought in. Another criticism of the efforts at enforcement in many places is that too little attention is paid to the attendance of younger children. When they approach the age of twelve or fourteen they come within the cognizance of the truant officer. But meanwhile they have fallen far behind other children of their age and have acquired habits and a manner that increase the difficulty of compelling their attendance and tend to demoralize the school where they do attend.

Regarding as a whole, however, the efforts to enforce the attendance sections of the law of 1903, it is undeniable that a great deal more has been done than in preceding years. This must be said in spite of the half-way endeavors and the numerous shortcomings that can be asserted of many localities. In some places, most conspicuously Newark because of its size, the attention given to the law has been persistent and thorough, and a notably

complete organization has been effected to administer the law. And, in general, if the latest press reports can be taken as an index, there is a gradually increasing disposition on the part of local school boards to enforce the attendance of children. This is seen even in the case of the controverted amendment of 1908.

A Settled: Success.

# CHAPTER VIII.

## SUCCESS OF THE POLICY

## 1883 to 1904.

What has been the achievement of all this endeavor? From the examination of the state's ideals for its child workers and its measures for realizing them, attention must now be turned to the practical question of results. First, for the period from 1883 to 1904.

*Minimum Age Limit.*—As to what was accomplished toward establishing a minimum age limit, specific, though rare, cases have been found pointing to an earnest enforcement of the law in its early years,[1] but none for the later part of the period. The factory inspectors regularly asserted that illegal child labor had practically disappeared. But this testimony is put under suspicion by the fact that, however clean it reported the state in any one year, the following report always records a further marked improvement.[2]

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[1] For example, *Newark Daily Advertiser,* Jan. 16, 1884. Editorial; *Rept. Insp. Fact.,* 1886, p. 24. See also Mrs. Lenora M. Barry, agent of the Gen'l. Assem., K. of L. in 1886 to investigate the condition of women wage earners, quoted in *Rept. Bur. Stat.* 1887, p. 204.

[2] *Rept. Insp. Fact.,* 1886, p. 7, "No extreme cases exist in New Jersey"; 1887, p. 7, notes a "vast improvement in the size of minors"; 1889, p. 6, modestly claims a decrease since 1888 of 1.45 per cent in number of children under 16 years of age; 1890, p. 54, the deputy for the district including Jersey City and Hoboken could "safely" say child labor had decreased 50 per cent since 1889; 1891, p. 7, reports that infant labor was "almost entirely" stopped; 1894, p. 13, the deputy for the southern part of the state, where the glass industry is the largest employer of children, naïvely reports that child labor was so nearly done away with in his district that only glass bottle manufacturers employed it to any extent; 1896, p. 9, reports "only a few" cases of violations;

This rather meagre evidence pointing to an observance of the law is overborne by the weight of evidence to the contrary. It was said in 1884, by a newspaper friendly to the policy at stake, that the effect of the law of 1883 had been "rather to expose the extent of this evil than to do away with it."[3] Less than a year was doubtless too short a time within which to expect much improvement. But reports from successive later dates still show a lax observance of the law.[4] The same general comment is supported further by the amount of well evidenced concealment of children and other practices to outwit the inspectors.[5] Internal evidence in the reports of the inspection department also testifies to a lax observance of the law. He reports in 1887[6] the discharge of 561 children, giving names for 186 of these. He then adds that many more under age were dismissed whose names the inspector did not get. Evidently not

1902, p. 275, deputy for the district including Newark, the most intensely manufacturing section of the state, reports the law is "closely observed" and that employers are very particular as regards age.

[3] *Newark Daily Advertiser,* Mar. 5, 1884, Editorial.

[4] This is the tenor of the testimony of the superintendent of schools for the most heterogeneous manufacturing city of Newark in 1886 (*Rept. Supt. Pub. Instr.,* 1886, App., p. 101), and in 1888 (*Ibid.,* 1888, App., p. 122), and of the superintendents at the chief glass centers of Millville in 1894 (*Ibid.,* 1894, App., p. 108), and Bridgeton in 1897 (*Ibid.,* 1897, p. 208).

[5] Much skepticism has been shown concerning the practice of concealing children from the inspectors. The allegations have often been set aside as fabrications of the inspectors to cover their failure to find children illegally employed. But besides irresponsible rumors, there is abundant evidence, from a variety of sources, that the thing was repeatedly practiced. The writer heard from workingmen, both union and non-union, from former inspectors, and from observers from the outside, specified accounts of such particularity that they cannot be all set aside as worthless.

[6] Page 62. This year the inspector first had the assistance of three deputy inspectors.

a very good observance of the law had been secured[7] in the four years since its enactment, or there would not have been so many to discharge in a single year. Moreover, in the loose manner of the dismissals and in the absence of any records of the individual cases, there is no assurance that a large number of those discharged did not find reëmployment as soon as the inspectors were gone,—an event which has been shown was not forestalled by the form of the law and which, according to the traditions, happened frequently.[8]

An examination of the reports of discharges for the ensuing years contributes to this question. The following table is compiled from the annual reports of the Inspector of Factories. Such data is first reported for 1887, when the Inspector was given the assistance of three deputies.

TABLE VI.

CHILDREN DISCHARGED

1887-1902.

| Year | Number Discharged | Year | Number Discharged |
|---|---|---|---|
| 1887 | 186[2] | 1895 | 75 |
| 1888 | 134 | 1896 | 77 |
| 1889 | [3] | 1897 | 323 |
| 1890 | [3] | 1898 | 25 |
| 1891 | 284 | 1899 | 161 |
| 1892 | 255 | 1900 | 59 |
| 1893 | 257 | 1901 | 30 |
| 1894 | 74 | 1902 | 202 |

[2] The body of the report states 561, of whom the names of only 186 were taken. In the statistical summary the number of discharges is stated as 186.

[3] Not reported.

[7] It is not to be inferred necessarily that the effort at enforcement was weak. Other considerations enter which will be noted in discussing the work of the inspectional force.

[8] As late as 1903, an investigation of child employment by the Bureau of Statistics of Labor and Industry reports a specific case which came to the personal knowledge of its agent. *Rept. Bur. Stat.*, 1903, p. 274.

Such a variation in the number of discharges speaks emphatically of a fast and loose enforcement of the law, especially in the later years, which connotes a lax observance. The greater number and regularity of discharges before 1894, however, would indicate a better observance before that year than after.

It appears further that the inspectors used a discretion beyond the authority of the law which helped to defeat the observance of the age limit. The provisions of the law requiring twelve weeks' attendance at school each year for factory children, between the minimum ages and fifteen years, permitted the inspectors to excuse orphan children from this requirement. When the law first went into effect, the difficulties in the way of immediate compliance with the attendance requirement by all the children affected led the inspectors to grant permits under this provision to large numbers of children.[9] From this extension of discretion it was easy, in time, to grant permits to children actually under age because of family poverty. The use of this discretion not provided in the law was doubtless a result in good part of the pressure of that opinion which opposed the law at the time of its consideration on the ground of the alleged necessities of poor people. By the end of the period it had come to be a frequent practice of most inspectors, especially during vacation periods. Many children, whom the law intended to keep from the factories, were thus admitted under cover of administrative approval.[10]

[9] *Rept. Insp. Fact.*, 1884, pp. 13 and 16.

[10] *Rept. Insp. Fact.*, 1902, p. 275. A deputy inspector complains that children allowed to work during vacation do not return to school as expected. An investigation by an agent of the Bureau of Statistics in 1903 disclosed cases of abuse of the orphans' permit, and gave the practice some comment in the report. *Rept. Bur. Stat.*, 1903, pp. 268, 271, 274, 275.

During the last half of the period such public interest as had existed in the observance of the law appears to have become quiescent altogether. No contemporary testimony has been found for these years. But reminiscent statements published later and the recollections of persons interviewed agree in the opinion that the law came to be disregarded for the most part in these later years. This is borne out by the conclusions of an investigator for the Bureau of Statistics in 1903.[11] If we add these traditions to the meagre contemporary evidence, the whole may be summarized in the statement that the law received during the first half of the period a partial observance which was not fully maintained during the second half.

An examination of the available comparative statistics will show more precisely the results of the policy. In this case also, any hope, however, for a close cut answer will be disappointed. All the statistics available are for children under sixteen years of age. Although variations in these do not necessarily measure changes in the amount of child labor which the state has sought to restrict, a limited use of such statistics may be made for an approximation to the results of the state's policy.[12]

[11] *Rept. Bur. Stat.*, 1903, p. 274. "Up to a comparatively recent time there seems to be no doubt as to the law having been evaded, and even openly disregarded in certain establishments in the glass districts, and also to some extent in other lines of industry."

[12] The age limit during this period was twelve for boys and fourteen for girls. There was thus a large part of those employed under sixteen who were above the legal age and whose numbers bore no direct relation to the activity of the inspectors and might have varied under any of the economic or other influences acting independently of the observance of the law. Variations in the number of these children, moreover, might more than offset any changes for the whole group due to variation in those below the legal age. Before these figures can have any significance for the question on the results of the policy of restriction, allowance

The following table shows that the average number of children under sixteen years old, employed in manufacturing, *as reported by the manufacturers themselves,* nearly doubled between 1870 and 1880 and then more than halved between 1880 and 1890, after which it again increased about one-half, but even so only to two-thirds

TABLE VII.

CHILDREN UNDER SIXTEEN IN MANUFACTURING.

| | Total Employees in Manufacturing | | Average Number Children Under 16 | | Per cent of all Employees | |
|---|---|---|---|---|---|---|
| Year | Number [1] | Per cent increase [2] | Number [1] | Per cent incr'se (+) decr'se (—) [2] | Per cent of all employees [2] | Per cent increase (+) decrease (—) [2] |
| 1870 | 75,552 | . . . | 6,139 | . . . | 8.2 | . . |
| 1880 | 126,038 | 66. | 12,152 | +94. | 9.6 | +17. |
| 1890 | 173,778 | 37 | 5,313 | —58 | 3.0 | —69 |
| 1900 | 241,582 | 39 (91)[3] | 8,042 | +51 (—34)[3] | 3.3 | +10 (—66)[3] |

[1] Twelfth Census, *Manufactures,* Vol. II, p. 540.
[2] Computed by the writer.
[3] Computed on 1880 as the base.

must be made for the effects of all these other influences on the older children under sixteen. The lack of any means for making this allowance accurately limits the closeness of the reasoning permissible upon these figures. But it does not necessarily render them worthless, except in the case of small changes. The greater the change in them, the greater must be the force of the other influences if they are to account for the whole change, and the easier to determine whether those other influences were present with sufficient force to cause the change, or whether a good part of it must be attributed to the plus or minus influence of the inspectors on children in the lower ages. The serviceableness of such statistics, within the general limitations because of their indirectness, thus depends on the amount of variation in them.

It may also be objected to the use of these statistics that, independently of the influence of other factors besides the policy of the state, there would be an increase or decrease in the number employed between the legal age and sixteen compensating a respective decrease or increase of those under the legal age. The

of the number in 1880. This falling off was notwithstanding an increase in the total number of wage earners in manufacturing between 1880 and 1890 of 37 per cent and between 1890 and 1900 of 39 per cent, or a total increase for the two decades of 91 per cent. More significant are the changes in the proportion which such children comprise of the total employees in manufacturing. That is to say, in spite of a steady increase of 91 per cent between 1880 and 1900 in all wage earners in manufacturing reported by the employers, the *number* of children under sixteen so reported decreased one-third and the *proportion* of such children decreased two-thirds:

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elimination of illegal child labor would tend to increase the demand for children above the age limit and *vice versa*. It is conceivable that the additions from that source would keep the total number employed under sixteen unchanged; so that the transition to a perfect elimination of child employees under the legal age would be accompanied by no change in the total employed under sixteen. The converse movement is also conceivable. But it is highly improbable that the supply of child workers between the legal age and sixteen would be elastic enough to take up all the change in the number employed below the legal age, or even a large part of it. This has been forcibly felt in the glass bottle industry, since the tightening up of the child labor law in 1904. Further, the demand for child workers is not altogether indifferent as to their age. In some industries there is a premium on the younger children; in others, on the older. If a legal age limit cuts off the services of the younger children, the pressure to substitute machinery, or to reorganize processes so as to use mature help, may be increased, and a readjustment made without a compensating increase in the employees between the legal age and sixteen. This also is illustrated by the glass industry. The pressure for machinery to do the tending boy's work has been increased, though as yet it has not resulted in generally satisfactory devices. But there is a noticeable readjustment of part of the work whereby unskilled adults are each taking the place of two or more "carrying-in" boys. The probabilities are, therefore, that the tendency toward a compensation, within the whole group under sixteen, for any variation in the lower ages would be far from sufficient to keep the total for the group unchanged.

As bearing on the further question whether this decline was common to all child employments or was peculiar to manufacturing, comparison can be made with the changes for children in all gainful occupations, *as reported by the children themselves or their parents to the enumerators for the population.*[13] The following table shows that, although the total number of persons, and the number of children from ten to fifteen years inclusive, engaged in gainful occupations, each about doubled in the twenty years from 1880 to 1900, the proportion of children in gainful occupations only increased little more than one-tenth.

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[13] Here an additional qualification must be noted. The returns are for those gainfully employed persons *resident* in New Jersey, but not necessarily *employed* in the state. A large number of wage earners, as well as professional and business people, resident in the territory adjacent to New York, follow their occupations in the latter place. And this is not confined to the border cities like Jersey City. A machinist, whom the writer interviewed in Passaic, went to his employment in New York daily. This, he said, was not unusual. The same is true of residents of Camden and its suburbs who work in Philadelphia. Children under sixteen probably would not enter into this interstate movement as largely as their elders, so that the number of gainfullly employed children resident in the state would not vary so far from the number who are both resident and employed in the state as would the respective numbers of adults. If this difference between such data for children and adults were constant, it could be disregarded altogether. But it is not necessarily so, and probably has decreased. Of course, there is a counter movement from New York and Philadelphia. But it is certainly much smaller than its opposite. These considerations, which render the occupational returns not quite comparable with the manufacturing returns, would need to be weighed in any close calculation. But the relative difference to the figures for the whole state would be small. And the degree of accuracy in the statistics themselves is not sufficient to justify such a refinement of calculation. In the comparison which the statistics permit, the qualification may be neglected.

TABLE VIII.

CHILDREN, TEN TO FIFTEEN, IN GAINFUL OCCUPATIONS.

| | Total Persons in Gainful Occupations | | Children 10-15 in Gainful Occupations | | Per cent of all in Gainful Occupation | |
|---|---|---|---|---|---|---|
| Year | Number [1] | Per cent [2] increase | Number [1] | Per cent [2] increase | Per cent of all occupied | Per cent [2] increase |
| 1880 | 396,879 | . . . . | 14,295 | . | 3.6 | . . . |
| 1900 | 757,759 | 81. | 30,261 | 111. | 4 0 | 11.1 |

[1] Twelfth Census, *Occupations*, pp. CXXIX-CXXX.
[2] Computed by the writer.

It appears from the comparison of the two tables that some strong special influence wrought in the manufacturing group a marked decline in the number and proportion of child employees which was somewhat more than compensated within the whole class of gainfully employed persons. This marked decline of child employees within a particular group, equaling in 1880 31.7 per cent and in 1900 31.9 per cent of the whole class of wage earners, is clear, although uncertainty as to the accuracy of the statistics does not permit the change in the figures to be taken as a measure of the decline.[14]

When query is made as to the reasons for this decline, there do not appear to be any economic or social influences during the period sufficient to account for it. Indeed, some of them tended to the opposite result. When now it is considered that the law upon child labor applied only to manufacturing and mining,—

[14] The manufacturing census of 1890 returned 5313 children under sixteen years, as reported by the manufacturers. The returns of the inspectors, secured in the same way, amounted to 6897. In 1900 the discrepancy was reversed, the census reporting 8042 such children and the inspectors only 4132. But the demoralization of the inspectorial work at the latter date destroys all value in the inspectors' returns as a check on the census.

the latter being unimportant relatively,—the explanation that lies at hand is that the decline was mainly due to the state's restrictive policy. This view is further supported by the fact that the administration during the first ten years of the law's operation was far more vigorous than during the later years. This corresponds with the marked decline between 1880 and 1890 and the nearly stationary condition thence until 1900.[15]

Turning from the question comparing the conditions of the moment with those of the past to that comparing them with the attainable standard striven for, there is much more definite information as to the number of children employed at the close of the period below the legal ages of twelve and fourteen, as well as indirect indices of child employment. The returns of the United States census of occupations in 1900 show the following tabulated information as to the number of children

TABLE IX

AGES OF GAINFULLY EMPLOYED CHILDREN[1]

| | Age Groups | | | | | | |
|---|---|---|---|---|---|---|---|
| | 10 | 11 | 12 | 13 | 14 | 15 | Total |
| Males: | | | | | | | |
| Number employed.... | 106 | 246 | 833 | 2,108 | 4,820 | 8,226 | 16,339 |
| Per cent of Pop...... | .6 | 1.5 | 4.7 | 12.7 | 28.6 | 50.3 | 15.8 |
| Females: | | | | | | | |
| Number employed.... | 74 | 148 | 494 | 1,462 | 3,561 | 5,951 | 11,690 |
| Per cent of Pop...... | .4 | .8 | 2.8 | 8.7 | 21.2 | 35.7 | 11.2 |
| Total: | | | | | | | |
| Number employed.... | 180 | 394 | 1,327 | 3,570 | 8,381 | 14,177 | 28,029 |
| Per cent of Pop...... | .453 | 1.15 | 3.52 | 10.7 | 24.9 | 41.8 | 13.5 |

[1] *Census Bulletin* 69, pp. 176-181.

[15] Another line of evidence to check up with these would ordinarily be the reports of the factory inspectors, as to children under sixteen years. But the data for the later years is so clouded with suspicion as to destroy any significance for this purpose of the considerable decline shown by them.

gainfully employed in all occupations outside of agriculture.[16] There is given for each sex separately and for both together the number so employed in each age, and the percentage which they comprise of the total population of that age.

It appears that 352 boys and 2178 girls under twelve and fourteen respectively were gainfully employed in 1900. That is a total of 2532. It is not related, however, how many at each age were employed in the manufacturing group of occupations, to which alone, with mining, the law applied. If it is assumed that the proportion of these children who were in manufacturing was the same as for all children under sixteen, namely 59 per cent,[17] then 1494 of them were so employed. That estimate contains too many elements of error to be taken at its face. But even allowing for error and for the fact that not all occupations reported by the children as "manufacturing" were necessarily followed by them in establishments to which the law applied, still the estimate certainly argues from the census returns a large violation of the law.

A clear though less comprehensive index of children under age in factory employment is found in the figures prepared in the bulletin cited for certain industries. The following table presents those for the manufacturing industries included in the bulletin statement. These also, it will be noted, are from the returns of the census of occupations, which were based not on the statements of the employers, but on the replies of individuals as to

[16] There were in agriculture 2232 between ten and fifteen years of age inclusive. Twelfth Census, *Occupations,* p. 168.

[17] There were, according to the table, 28,029 children under sixteen years gainfully employed outside of agriculture. Of these, 16,593 (*Cen. Occup., p. cliii.*), or 59 per cent, were in manufacturing occupations.

the occupations pursued by them and their families. There is given for each age stated the number of that age employed in the industry and the percentage that number comprises of all from ten to fifteen years in the industry.

## TABLE X

### AGES OF CHILDREN IN SPECIFIED INDUSTRIES[1]

| | Age Groups | | | | | | |
|---|---|---|---|---|---|---|---|
| | 10 | 11 | 12 | 13 | 14 | 15 | Total |
| Cotton: | | | | | | | |
| Number ....... | 2 | 9 | 37 | 68 | 173 | 192 | 481 |
| Per cent....... | 0.4 | 1.9 | 7.7 | 14.1 | 36 | 39.9 | 100 |
| Silk: | | | | | | | |
| Number ....... | 9 | 20 | 97 | 312 | 728 | 1,112 | 2,278 |
| Per cent....... | 0.4 | 0.9 | 4.3 | 13.7 | 32 | 48.8 | 100 |
| Glass: | | | | | | | |
| Number ....... | 15 | 54 | 127 | 159 | 232 | 231 | 818[2] |
| Per cent....... | 1.8 | 6.6 | 15.5 | 19.4 | 28.4 | 28.2 | 100 |
| Tobacco: | | | | | | | |
| Number ....... | 1 | 4 | 16 | 64 | 151 | 202 | 438 |
| Per cent....... | 0.2 | 0.9 | 3.7 | 14.6 | 34.5 | 46.1 | 100 |
| Other Textiles.... | | | | | | | |
| Number ....... | 1 | 7 | 36 | 154 | 462 | 938 | 1,598 |
| Per cent....... | 0.1 | 0.4 | 2.3 | 9.6 | 28.9 | 58.7 | 100 |
| Total: | | | | | | | |
| Number ....... | 28 | 94 | 313 | 757 | 1,746 | 2,675 | 5,613 |
| Per cent....... | 0.5 | 1.6 | 5.5 | 13.6 | 31.1 | 47.7 | 100 |

[1] *Census Bulletin* 69.

[2] All but 43 were boys.

The figures for each sex are not given separately, so that the exact total of boys and girls under their respective age limits cannot be seen. The total under twelve years, 122, is too small by the number of girls between twelve and fourteen. The total under four-

teen years, 1192, is too large by the number of boys between those limits. In the preceding table the total children over twelve and under fourteen comprised 60 per cent boys and 40 per cent girls. That proportion would not necessarily hold for a few selected industries. But if it may be assumed to hold in this case, then, of the 1070 over twelve and under fourteen, 40 per cent, or 428, were girls under fourteen. Adding these to the 122 under twelve, gives a total of 550 children illegally employed in these industries alone.

There is an interesting accord between this figure and the 1494 estimated to be illegally employed in all manufacturing. These five industries were the leading child employing industries. According to the table they included 5613, or *34 per cent,* of the 16,593 children under sixteen years in all maufacturing occupations. The 550 estimated to be illegally employed in these industries constitute *36 per cent* of the 1494 above estimated to be illegally employed in all manufacturing.

In the light of the census returns, it is entirely reasonable to say that something over a thousand children under the minimum age were illegally employed. If attention be fixed on all occupations, instead of merely those to which the law applied, then 2532 children were employed under the ages set as the standard. If consideration be had, not for the legal age, but for fourteen years, which was coming to be the standard, then 5471[18] under fourteen were employed in all industries outside of agriculture, 3227[19] in manufacturing and 1192 in the five especially child employing industries. Some of these figures are estimates and cannot be taken entirely without reservation. But they reveal a very consider-

[18] See table IX.

[19] This is 59 per cent of 5471. For derivation of 59 per cent, see above, p. 178, note 17.

able distance between the success attained for the policy of the state and the goal of that policy.[20]

The conditions at the close of the period are further illuminated from two investigations by different state departments. Both of these were made in 1903 during the term of Governor Murphy. One was conducted by Mr. John L. Swayze, secretary to the Governor, and by

[20] Some further figures of interest, but for a limited area, have come to hand. The superintendent of schools for Trenton made in the year 1899-1900 an inquiry into the reasons for the withdrawals from school during that year. Some of those who left school removed from the city. Of those who left school and still remained in the city, the number who left to go to work and the per centage which they comprised of the withdrawals who remained in the city and of the total in the several grades, is given for each grade in the following table.

WITHDRAWALS FROM SCHOOL FOR WORK, TRENTON 1899-1900[1]

| | Grade 1 | Grade 2 | Grade 3 | Grade 4 | Grade 5 | Grade 6 | Grade 7 | Grade 8 | All Grades |
|---|---|---|---|---|---|---|---|---|---|
| Number left to work ......... | 23 | 32 | 72 | 83 | 107 | 91 | 53 | 12 | 473 |
| Per cent of those remaining in city..... | 13 | 32 | 55 | 58 | 77 | 81 | 79 | 31 | 55 |
| Per cent of total in grade. | 1.04 | 1.92 | 6.05 | 8.7 | 13 | 11.46 | 11.06 | 4.03 | 6 |

[1] Compiled from data in *Rept. Supt. Pub. Instr.*, 1900, p. 309.

The withdrawals for work increased rapidly between the second and third grades, which would be reached before the legal age even by the most backward. The withdrawals continued to increase rapidly to the fifth and sixth grades. There is no way of telling how many of those who withdrew for work were under the legal age. Probably most of those below the fifth grade anyway were under the age limit. This is not to say that the average age of those in the fifth and sixth grades is from twelve to fourteen years. But children who are taken from school and put to work are, from family hardship or indifference, usually more backward than the average for their age. So that they reach the legal age for employment at an earlier grade than the others. Also, there

him placed for the time being in active charge of the factory inspection department during the acute stage of the agitation for a reform of the administration of the law. The object was not to discover the precise amount of child employment, but to settle the question of fact, then in dispute between the critics and defenders of the inspection department, as to whether the law was being violated in an important degree. The work was done by a person engaged entirely outside of the corps of inspectors and supposedly unknown to anyone but those in charge of the investigation.[21] He began his work October 6, and continued throughout the fall and winter. By detective methods a large number of sus-

is no way of telling how many of these below age went into manufacturing employment, to which alone the law applied. Yet, even so, the condition revealed is very unsatisfactory from the point of view of the purpose of a restrictive policy on child employment. For, at the rate of withdrawal shown in each grade about nine out of every one hundred who entered the first grade left school *to go to work* before they had completed the fourth grade, and about fourteen out of every one hundred before they had finished the fifth grade. This computed rate, of course, would not necessarily be the true one, because the children of each succeeding year would not be comprised solely of those who had attended from the first grade in Trenton, or would the number each year be the same as if that were so. Some would have entered each advanced grade on moving into the city from other places. These would probably, in a growing population, more than offset those who had withdrawn. But it is probably sufficiently near the truth to be taken without much reservation. Moreover, this tells nothing of those immigrant children and others who, under the lax enforcement of compulsory attendance, never entered school at all, or who, after leaving for some other purpose than work, turned into some employment never to return to school.

[21] The labor unions had made investigations of their own and had accumulated a mass of evidence and affidavits which they laid before Governor Murphy. But Mr. Swayze did not consider the evidence of a conclusive character. If there were children illegally employed, he wanted the specific cases, with names, residences, family, and age thoroughly attested.

picious cases was easily accumulated. These were sifted by investigation of the addresses given, interviews with parents, reference to school records and officers, to parish records, official registries of births, family records and neighbors. By these methods, applied in Paterson, Passaic, Newark, and the glass factory towns, a residuum of apparently authentic cases of illegally employed children was obtained.[22] No statement of the

Repeated efforts were made during the summer with the regular deputy inspectors, to see if there were such verifiable cases. But, even after transferring to the disputed centers men from other districts, the results were not convincing either way. It was then decided to try an independent investigator who would work incognito. Governor Murphy supplied the money for the investigation from his contingency fund. After trial of several unsuccessful men, the officials of the state labor organizations found the man who did the work.

[22] The reliability of these cases was hotly challenged during the agitation at the time, and the number of violations alleged was declared, therefore, without adequate grounds. The only specific and detailed impeachment which the writer has discovered, however, was that of a person who told him of being given a hundred or more names of suspected children to look up. Of these only a half dozen or so were shown to be under age. For fully a fourth of them, there was no such street number as the one given, or else it was that of a vacant lot. The remaining two-thirds proved to be of legal age. Such was the evidence, it was said, on which the alleged numbers of violations were based. This Mr. Swayze explained to the writer as follows. Before the special agent could sift all the suspected cases he accumulated in any place, it was necessary for him to move to some other point. The unfinished cases were then turned over at a later date to agents for examination. It was some of these names which were given to the person mentioned. The fact that so few of that lot were shown to be under age did not prove there were no more. Every one of the fictitious addresses should be highly suspected, for back of every address was a child who gave it to the investigator; and the wrong address may well have been given to throw him off the trail of a real violation. But in no case, said Mr. Swayze, were violations alleged on the ground of these unverified suspected cases. Only those children whose residence and family had been identified and whose age had been ascertained on trustworthy corroborated evidence were counted in the statements of the number of violations.

exact number of such cases in the aggregate was ever published, though the number in some districts was. As explained to the writer by Mr. Swayze, he refrained from committing himself exactly because the object of the investigation was accomplished without investigating every suspected case or pursuing to a certainty every case investigated; and without that the amount of violation could not with fairness be definitely stated. From the number of cases which were fully sifted, however, Mr. Swayze was convinced that there were "several hundred" children illegally employed in the state as a whole.[23] This, too, was after an agitation for a

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From an interview, also, for half the night with the man who made the investigation, in which he told of his methods and recounted some of his devices for gaining desired information, the writer is convinced that the results obtained must have had a high degree of accuracy.

On the whole, the weight of the evidence is for the approximate correctness of the returns from the investigation.

[23] This Mr. Swayze said in an interview with the writer. In a published interview in December 1903, he said of the textile district,—chiefly Paterson and Passaic,—that in the six weeks the investigator was there, he certified 73 cases of illegal employment and had over 200 suspected cases still. The ages of those illegally employed ranged from eight years up to the limit, then fourteen years. In one large mill, 26 cases were found. (*Newark Evening News*, Dec. 26, 1903.) In the report of the work of inspection for 1903, he said, speaking of a wider area, that there were several factories with from 6 to 20 cases. *Rept. Insp. Fact.*, 1903, p. 5.

The conclusions from this investigation were supported by the testimony of school officials. The Superintendent for Newark said that in September, 1903, all pupils of the preceding June, between twelve and fourteen years of age who had failed to return to school, were looked up. Out of 1000 or so, 200 were found employed illegally. (*Rept. Supt. Pub. Instr.*, 1904, p. 111.) In the report of inspections for 1903 it was stated that returns from eighty schools in manufacturing centers showed 398 children attending who were working in factories the previous year. *Rept. Insp. Fact.*, 1903, p. 3.

year or two, which may have brought an improved observance of the law. It should be noted, also, on the other hand that the number of violations reported was not quite applicable to the period under discussion, because the act of 1903 raising the age limit for boys to fourteen years had taken effect in the preceding September. The industries chiefly involved, according to Mr. Swayze, were glass, cotton, woolen, silk, thread, handkerchief, hosiery, tobacco and cigars.

The other investigation was made by the Bureau of Statistics during 1903. It inquired into several aspects of child labor. For the results on some of these, recurrence will be made to this report. On the matter of observance of the law, it reached conclusions quite the opposite from those just noted. For this it was roundly criticised when the report appeared, at the height of the agitation for a stricter law in the winter of 1903 and 1904.[24] The bureau sent an agent into a number of the manufacturing districts of the state to look up factory children in their homes and inquire into their ages, school attendance, and the other points looked into. Data were collected for nearly a thousand children ranging in age, as stated, from twelve to eighteen. Of these 481 were under sixteen. No boys were reported under twelve years old and only nine girls were reported under fourteen. It was thus shown, ostensibly, that only nine of all those investigated were illegally employed.[25] But the fact that the data for the ages depended upon the statements of the children themselves or their parents

[24] This criticism was first provoked by the advance publication of a part of the report dealing with the relative position of New Jersey in the matter of child labor, based on census figures, and discussing the question of exempting certain children from the law's prohibitions.

[25] *Rept. Bur. Stat.*, 1903, pp. 253, and 273.

impeaches its reliability and renders the evidence on this point worthless.[26]

Although the returns have no value in this connection for the year in which the investigation was made, they do throw light on the observance in years immediately preceding. The report of the bureau for 1903 published the data for each child as well as the summaries for all. This included the present age of the child and his age when he began work. While, as stated, only nine confessed to an age *at the time* below the legal minimum, many more of them gave their age *at begin-*

[26] *Rept. Bur. Stat.,* 1903, p. 273, "The agent obtained his information on ages directly from either the children themselves or their parents." The reasons for suspicioning the replies from these sources are (1) that the agent was from the Bureau of Statistics of Labor and Industry, and might therefore be easily confused by the undiscriminating and suspicious with the factory inspector; (2) he was making a special inquiry into child labor and would therefore have his motives for asking the ages put under suspicion. For these reasons children under age,—instructed always to give their age as up to the legal limit,—or their parents would be induced to conceal the true age. (3) Finally, the agitation of the preceding two or three years, which had continued with cumulative intensity, would have greatly increased the suspicions entertained by child workers and their parents for anyone prying into the ages of the children.

The suspicion of the figures is supported by internal evidence from the report. Though denying that any boys were seen who appeared to be under twelve (p. 273), the agent thought a large proportion of the children in one large factory were of "tender" years, "some boys appearing to be scarcely twelve" (p. 271). In one glass factory there were "several boys who were, undoubtedly, under twelve years, but their right to work was backed up by permits from the factory inspector, or affidavits of parents to prove that, notwithstanding appearances, the children . . . were over twelve years" (p. 274). The reliability of parental testimony, even when sworn to, is here questioned by the agent himself, and his suspicion recorded that the returns were, in this case anyway, incorrect. On the same page as the foregoing is the record that in one of the mills some children were found at work who had been dismissed by the inspector on his last visit.

*ning work* as below that minimum. From this information it was possible to compute the number who began work each year and the number of these who were under the legal age when they began. The results have been arranged in the following table. From this it ap-

TABLE XI

CHILDREN BEGINNING EMPLOYMENT UNDER AGE[1]

| Year | Total Began Employment | Under Age | | | |
|---|---|---|---|---|---|
| | | Boys | Girls | Total | Per cent of Total Beginning |
| 1896 | 1 | 0 | 0 | 0 | 0 |
| 1897 | 2 | 2 | 0 | 2 | 100 |
| 1898 | 11 | 2 | 4 | 6 | 55 |
| 1899 | 103 | 3 | 42 | 45 | 43 |
| 1900 | 309 | 9 | 82 | 91 | 29 |
| 1901 | 318 | 3 | 79 | 82 | 25 |
| 1902 | 173 | 1 | 59 | 60 | 34 |
| 1903 | 25 | 0 | 8 | 8 | 32 |
| Total | 942 | 20 | 274 | 294 | 31 |

[1] Arranged from data in *Rept. Bur. Stat.*, 1903.

pears that out of the 942 for whom this information was given 294, or 31 per cent, began work under age. The number beginning work each year is, except for the years 1899 to 1902, too small to support any deductions. Considering the years excepted, however, it appears from the children's own statements that the number and proportion of those beginning work who were under the legal age indicates a very loose observance of the law. The figures for 1903 are too small to be conclusive, but they suggest that the conditions had not improved as much as the children's statements of their present age would indicate. At any rate, if the results of this limited investigation[27] show on their face very

[27] The number included in the tabulation was 942. Although this included some over sixteen years old, it amounts to less than 12 per cent of the 8042 children under sixteen reported by the manufacturers in the census and less than 6 per cent of the 16,593 reported

little violation of the law in 1903, they also show that violations had been numerous up to the very moment the investigation was made.[28]

*Minimum School Attendance.*—Inquiring now as to the minimum attendance at school, the section of the law pertaining to that fared little better than the age limit. This attendance was to be evidenced by a certificate from the teacher to the employer. The administrative weakness of this requirement of school attendance has been discussed. The experience with it can now be briefly told.

An honest effort was made by the earlier inspectors at least to enforce this requirement.[29] But success in this matter required the coöperation of the school authorities. This was wanting, partly from a dislike

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by the occupation census as engaged in manufacturing employments.

[28] If the report of the manufacturing census be taken that there were 8042 children under sixteen employed in manufactures and if it be assumed that their ages ranged from twelve to fifteen inclusive and that they were distributed throughout these ages in the proportions shown in table X, then 3860 were beginning employment each year. Taking now the figures for 1900 and 1901, the years for which the returns of the investigation by the Bureau of Statistics were largest, it appears that something more than 27 per cent of those beginning employment were under legal age. For the whole state, that would argue that 1032 of the 3860 beginning employment each year were under legal age. If the 16,593 children reported by the occupation census be taken, then 7964 began work each year, of whom 2150 were under legal age. Since some of the figures in the calculation are not above suspicion and since some important qualifications have been omitted from it, the results cannot be relied upon. But they suggest that in all probability the law was greatly disregarded.

[29] The factory inspector's report for 1884 gives evidence of that (pp. 13, 16, 17). The testimony of two of the deputy inspectors for that early period, whom the writer was able to find, also indicates that. Similar testimony from three of the later inspectors has the same import so far as their districts were concerned.

for the bother of the schooling certificates, but chiefly from insufficient accommodations. At first it was a lack of buildings so acute as to compel the inspector to wink at the law for a while.[30] This, for one thing, gave the traditions a wrong start. But in time the question of accommodations became a question of night schools,[31] attendance at which was accepted by the law. But these were not very widely provided. So it came to be that unless night schools were provided, little effort was made to enforce the law. In general, the activity in its behalf varied greatly as between the inspectors in the different districts and between successive inspectors in the same district.[32]

[30] *Rept. Insp. Fact.*, p. 16.

[31] *Ibid.*, 1887, p. 9. The employers disliked the changes in their working force occasioned by the children complying through attendance at day school. This, coupled with the desire of the children not to lose any time from work, induced the children to depend on night schools.

[32] The superintendent of schools for Paterson complained of the non-observance there in 1895. (*Rept. Supt. Pub. Instr.*, 1895, p. 271.) Some of the inspectors of the later years confessed to the writer their inability to enforce this provision, though in some cases the fault may well have been in the lack of enterprise by the inspector. That the provision failed of passable observance is also augured by the ill reputation it had at the close of the period. See, *e. g.*, *Message Governor Murphy*, 1903, p. 9-10, and testimony at committee hearing on the bill of 1903 to raise the age limit to fourteen years for boys and abolish the attendance requirement. *Newark Evening News*, Feb. 11, 1903.

The ununiform and intermittent character of the efforts at enforcement are shown in the inspectors' reports of the number of certificates of attendance ordered each year. The figures cannot be trusted for exactness, but they serve the present purpose. Even when certificates were ordered, it does not insure that the attendance requirement was then fulfilled, for, by the testimony of former inspectors interviewed, the children were seldom discharged pending the filing of a certificate. They were ordered to attend night school until the condition was met. But, as will be seen presently, there was inadequate provision for insuring their at-

Since compliance with this provision was by way of the night schools, it will be in point to note what was done through them. First as to the provision of them. The inspector's report for 1889 records that night schools had been opened in all the cities and in many of the small manufacturing towns and were well attended.[33] But either this was optimistically colored or there was a marked reaction leaving only intermittent provision in many centers. Later reports of the inspectors testify to this.[34] The lack of public provision is attested by the efforts of employers in certain cases to supply the need.[35] From the evidence it appears that fairly regular provision was made in some places, either by public authorities or employers; that in other centers irregular at-

tendance, unless the employer,—as many did,—saw to it. When the employer,— as many others did not,—took no interest in the matter, the child could disregard the order with impunity. For there was little to fear in most places from any truant agent, and before the inspector could return, the child might be beyond the age, or be employed elsewhere. The data are given in the following table:

SCHOOL ATTENDANCE CERTIFICATES ORDERED[1]

| Year[2] | Number of Districts Reporting | Total Certificates Ordered | Year | Number of Districts Reporting | Total Certificates Ordered |
|---|---|---|---|---|---|
| 1891 | 1[3] | 50 | 1897 | 4 | 217 |
| 1892 | 1[3] | 20 | 1898 | 2 | 44 |
| 1893 | .. | ... | 1899 | 4 | 411 |
| 1894 | 1[3] | 6 | 1900 | 5 | 1,283 |
| 1895 | 2 | 235[4] | 1901 | 6 | 2,162 |
| 1896 | .. | ... | 1902 | 6 | 928 |

[1] Compiled from *Rept. Insp. Fact.*

[2] Not reported before 1891.

[3] Same one of the six districts.

[4] There were 223 from a district not before reporting.

[33] *Rept. Insp. Fact.*, 1889, p. 6.

[34] *Ibid*, 1893, pp. 45, 57; 1894, p. 29; 1896, p. 33; 1899, p. 49; 1902, p. 238.

[35] *Ibid*, 1884, p. 16; 1889, p. 6.

tendance caused a discontinuance, to be followed, possibly, in a later year by a new effort; and that in many places the children lacked any opportunity for night school attendance. The condition in this respect, however, improved toward the end of the period.[36]

When it is inquired how large the attendance at night school was, the answer is rather unexpected after reading the complaints of want of facilities. From the first the inspector's reports contain testimony of an appreciable attendance by factory children.[37] This is supplemented in the later years by other evidence.[38] It should be noted, also, that many employers insisted on their child employees conforming with the law in this matter.[39] But at the same time there is evidence that, however gratifying this attendance was, absolutely considered, it was relatively less than a compliance with the law required. As early as 1887 the inspector noted an irregularity in attendance for want of truant officials connected with the night schools.[40] This complaint for the whole period survives in the recollections of persons interviewed by the writer. Later recorded testimony also points to a very important deficiency in the attendance demanded by the law.[41] Some measure of that deficiency is given in the following table compiled from the returns of the investigation by the Bureau of Statistics. There were 209 who reported their ages as

[36] See *Repts. Supt. Pub. Instr.*

[37] *Rept. Insp. Fact.*, 1885, p. 26; 1893, p. 45; 1894, pp. 39, 51; 1896, p. 69.

[38] *Rept. Supt. Pub. Instr.*, 1902, p. 132; *Rept. Bur. Stat.*, 1903, p. 259.

[39] *Rept. Insp. Fact.*, 1899, p. 135; *Rept. Supt. Pub. Instr.*, 1904, p. 133. Also testimony of some inspectors of that period.

[40] *Rept. Insp. Fact.*, 1887, p. 10.

[41] *Ibid.*, 1901, p. 229; *Rept. Supt. Pub. Instr.*, 1902, p. 157.

under fifteen years and also stated whether or not they attended night school.

TABLE XII

ATTENDANCE AT NIGHT SCHOOL

| Age | Total Reporting | Attended Night School | | | |
|---|---|---|---|---|---|
| | | Yes | Per cent Total | No. | Per cent Total |
| 12 | 5 | 0 | 0 | 5 | 100 |
| 13 | 21 | 2 | 9 | 19 | 91 |
| 14 | 183 | 52 | 28 | 131 | 72 |
| All Ages | 209 | 54 | 26 | 155 | 74 |

*Minimum Physical Condition.*—The power of the inspectors to require a certificate of physical fitness does not appear to have drawn enough attention to cause any records to be made concerning it. Nothing has been discovered in the inspector's reports bearing on the use of that power, or has any evidence from any other source come to the attention of the writer. It cannot be said that it was never used. But on the other hand, there is nothing to prove that it ever was. The silence of all persons concerning it points to a neglect of it.

*Hours For Children.*—The observance of the law limiting the hours for children under sixteen years to ten a day and sixty a week can be ascertained only in part. It was found that, at the close of the preceding period, the regular scheduled work day was pretty generally within ten hours, but that a great deal of overtime was exacted even from children, and that the exceptions to the ten hour day were mostly in industries employing women and children.[42] The report of the factory inspector in 1888 gives the hours worked in all the establishments inspected. From that data, it appears

[42] See above p. 25.

that there were 31 whose regular running time was over ten hours for the first five days of the week, though not over sixty hours for the whole week. There were 2 which ran eleven hours the first five days and sixty-one hours for the week. In all of these 31 establishments, there were 558 children under sixteen years of age, which is only 8.5 per cent of all children under sixteen years reported for the factories inspected. But as the returns for hours were incomplete, this percentage is probably small. All but 15 of these 558 were in textile industries of some sort. This would indicate a small amount of violation for the state as a whole, but a great concentration of it in one group of industries. Here again the regular scheduled day appears to have been within the law in all but a few cases, which affected only a small proportion, although an important number, of the children under sixteen years. But nothing was said of overtime. So that a fair comparison with the conditions before the law was passed cannot be made.

No other evidence for the period has come to hand until an insight into the practice at the close of the period is secured from the investigation by the Bureau of Statistics in 1903. This included 938 children from twelve to eighteen years of age. From the statements of these children, only 4.3 per cent of them had regular working days of more than ten hours.[43] That is about half the proportion in 1888, but the number of cases considered was only a fraction of those in the former year, so that the difference cannot be taken at its face. As to overtime in 1903, it was reported by only 8 males and 35 females. The number of hours of overtime ranged from five and a half to eleven hours a week. It is suspicious that all this was reported from the southern

[43] *Rept. Bur. Stat.*, 1903, p. 253.

part of the state, none being reported for the much greater manufacturing centers of the north, including the textile centers of Passaic County.[44]

Contemporary testimony on the observance of this law is not abundant. The reports of the inspectors do not give much attention to the enforcement of the law, although they frequently complain of the hardship of the long hours upon children. It appears, however, that some effort was made, though not uniformly by all the inspectors,[45] to secure a compliance with the law. But their influence could not have been great. No records of any prosecutions are made. The tendency of the time was in the direction of a shorter day and the compliance secured was probably that of the more willing employers who did not require much pressure to decide them. Certainly no very unwilling employers were among the number; for there were no contests such as would follow a vigorous attempt to enforce a law touching employers at so sensitive a point as the length of the working day and week.

The act of 1892, limiting hours to fifty-five a week, was never enforced, though many employers complied with it voluntarily so far as children were involved. The uncertainty during the years of litigation, followed by the appointment of a less energetic inspector, combined with the loss of prestige which the law suffered from the attacks upon its constitutionality, all contributed to a quiet relaxation of efforts in behalf of its observance. No one, not even the labor organization,

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[44] *Rept. Bur. Stat.*, 1903, p. 254.

[45] This appears from interviews with inspectors of that day. One said he never tried to enforce the law. He noted the pressure upon manufacturers to get out their orders and always told them to go ahead.

cared to spend energy on a measure suspected of having no vitality. Observance thus became entirely optional.

*Health and Safety of Children.*—The law for safeguarding the health and safety of children, like that to insure a minimum physical condition, appears to have received no attention. It is doubtful if it had any effect at all on the practice of employers and their foremen. Many would not endanger a child employeee in such a manner, even if there was no law on the subject. The precautions of such as these were taken regardless of the law. Those who were indifferent to this interest of their child workers, probably felt little if any check upon their practice on account of the law.[46]

*Compulsory Attendance.*—As would be expected from the apathy disclosed, the results from the law were very meagre. As usual there is lacking any reliable measure of these results. On the negative side there is testimony showing that many children escaped from the requirement of the law.[47] Governor Abbett in his message of 1887 gave figures for twenty cities and

[46] A little light on the rigor of children's labor is found in the returns of the investigation by the Bureau of Labor. There were 485 children who reported their ages as under sixteen and stated the position in which they had to work. Their answers are tabulated in the table.

POSITION OF CHILDREN AT WORK 1903

| Age | Total | Position at Work | | | | | |
|---|---|---|---|---|---|---|---|
| | | Sitting | Per cent Total | Standing | Per cent Total | Both | Per cent Total |
| 12 | 5 | 1 | 20 | 2 | 40 | 2 | 40 |
| 13 | 21 | 5 | 24 | 9 | 43 | 7 | 33 |
| 14 | 183 | 73 | 40 | 51 | 28 | 59 | 32 |
| 15 | 276 | 99 | 35 | 91 | 33 | 86 | 32 |
| All Ages | 485 | 178 | 36 | 153 | 32 | 154 | 32 |

[47] *Rept. Insp. of Fact.*, 1887, p. 9; *Rept. Supt. Pub. Instr.*, 1887, p. 35; 1890, App., p. 78; 1897, p. 238.

towns showing that 12,365 children between seven and twelve years of age,—the period of compulsory attendance,—had attended school less than the required twenty weeks, and that 26,456 had attended no school, public or private, at all.[48] The present recollections of men of those days, also, agree that the law was far from bringing the results desired.

Yet the law was not without appreciable effects. That is shown by testimony[49] and is evidenced by the steady, though small, improvement in the percentage of the total enrollment in daily attendance in the twelve cities before considered.[50] The following table shows this improvement in average daily attendance.

TABLE XIII.

PER CENT AVERAGE ATTENDANCE OF ENROLLMENT 1881—1900[1]

| Year | Average Attendance | Year | Average Attendance |
|---|---|---|---|
| 1881 | 60.4 | 1891 | 65.3 |
| 1882 | 60.6 | 1892 | 67.2 |
| 1883 | 62.9 | 1893 | 65.3 |
| 1884 | 63.0 | 1894 | 66.6 |
| 1885 | 65.6 | 1895 | 67.0 |
| 1886 | 64.5 | 1896 | 68.8 |
| 1887 | 65.1 | 1897 | 69.5 |
| 1888 | 65.1 | 1898 | 70.5 |
| 1889 | 66.7 | 1899 | 67.3 |
| 1890 | 65.3 | 1900 | 67.9 |

[1] Compiled from *Repts. Supt. Pub. Instr.*

[48] The figures are not above suspicion since they were computed in part from the returns of the school census. (See above, p. 19, note 26). Yet, considering that they pertain to the ages 7 to 12 years, while the manipulation of the census was chiefly confined to the margins of the period of school age, they may be taken as sufficiently near the truth to conclude from them a considerable failure of the law to secure the results sought.

[49] *Rept. Insp. Fact.*, 1891, p. 11; *Rept. Supt. Pub. Instr.*, 1894, App., pp. 108 and 129; 1901, p. 296.

[50] See above, p. 22.

The percentage of enrollment in daily attendance averaged around 60 from 1876 to 1883 when it began to rise and continued until 1885. Since the compulsory attendance law was not passed until 1885, this abrupt improvement in the attendance could not have been due to that. It is not unreasonable to attribute it in some part, at least, to the child labor law of 1883. Be that as it may, from 1885 to 1890 the percentage in attendance fluctuated closely about 65. This suggests just such results as would be expected from the meagre and indifferent efforts to enforce the attendance law during those years. From 1892 a gradual but small improvement is noted until the end of the century. This is not enough change to prove the efficiency of the law, but it coincides with the slowly, although inadequately, widening attempts at enforcement.

# CHAPTER IX

## SUCCESS OF THE POLICY.

### SINCE 1904.

The observance of the law since 1904 has been far superior to that at any time prior to that date. This has been due chiefly to the fact that the new department of inspection has made a noteworthy endeavor to enforce the law. There has been also a marked improvement in the local efforts to enforce the compulsory attendance law.

*Conditions Favorable to Observance.*—But besides the stronger endeavor to enforce the law, the observance of it has profited by some favorable conditions. One influence for better observance has been the wider militant interest in the law. The committees appointed by local trade unions during the agitation for the present law were continued as local vigilance committees.[1] Philanthropic societies took a corporate interest in the enforcement of the law, both in action at their larger conventions[2] and in observing and reporting to the inspectors the conditions in their several localities. These activities were all limited to reporting suspected cases to the inspectors and follow-

[1] Most active, probably, was the Essex Trades Council of Newark and vicinity. It early took steps to stimulate public interest in the law. See *N. J. Rev. of Char. and Cor.*, III, p. 215.

[2] Such were the State Federation of Woman's Clubs, *Newark Advertiser,* Oct. 24, 1904; the Convention of the New Jersey Congress of Mothers, *Ibid.*, Oct. 27, 1904; Annual Meeting of the New Jersey Consumers League, *Ibid.,* Oct. 25, 1904; and the Annual Convention of the Woman's Christian Temperance Union, *Hoboken Observer,* Oct. 29, 1904.

ing them up. But in a few localities independent prosecutions were conducted by the Society for the Prevention of Cruelty to Children.[3] These independent prosecutions were not always conducted with wisdom, but they added to the pressure for an enforcement of the law. Finally, the newspapers gave publicity, even if often in a sensational manner, to all that was going on. The public interest was thereby constantly stimulated and kept alert.

Another favorable condition was a far less resistant, if not a more sympathetic, attitude of the employers. The reports of the Department of Labor repeatedly comment on the apparent desire of the body of manufacturers to comply with the law, a desire expressed in various efforts to meet the department half way, and more, in observing the law. This same attitude was displayed in many interviews had by the writer, even after allowing for all appearances of dissimulation. There can be no doubt that experience since the law was passed has led employers to look with much less fear for their business upon the present age limit for child labor and, fearing less, to let their approval of the general purpose of the law dominate their opinion of it.[4] That there are still many whom the advocates of the law consider as unregenerate does not minimize the truth of the above statement as to employers at large.

*Conditions Unfavorable to Observance.*—Although the times have been far more conducive to observance, there has been no lack of resistance to the law. As a rule this has been most pertinacious among the small em-

[3] *Rept. State Charities Aid Assn.*, 1907, p. 11.

[4] This change of sentiment on the part of employers was noted by Mr. Hugh F. Fox, in a review of the operation of the new law in 1905. See *Ann. Amer. Academy of Pol. and Soc. Sci.*, Vol. XXV, May, 1905.

ployers as a class, although individual pertinacity has nowhere excelled that of some large child-employing manufacturers. A good part of the resistance by the large concerns, however, is without the special sanction, or even the knowledge, of the heads of the business. Superintendents and foremen, under the pressure of their superiors who look only to the expense account and the output, resort to the employment of children under age when that promises to reduce expenses, or when no older children are immediately available to help get out the work on time. This is no part of the policy of the concern. Yet when this happens repeatedly, as is related of some manufacturing establishments, it must be regarded as tacitly sanctioned. Many concerns, in order to prevent such repetition, have placed the hiring of all children, if not all employees, in the hands of one person, to whom department heads and foremen send when in need of additional help. This brings every child with his papers under the eye of one responsible person.

That there has been intentional resistance to the law is shown by the attempts which have been made to thwart the inspectors by concealing children or by sending them home when the officer made his visit. This was done much more in the early years of the present law than has been done lately. Experiences related to the writer by some inspectors with concerns both in the glass country of the southern part of the state and in the varied manufacturing districts of the north, with direct and mutually supported testimony from employees, in both sections, indicate that many employers, especially glass manufacturers, determined to test the earnestness and determination of the new corps of inspectors at the outset. Much of this was probably looked upon by subordinates and foremen, as well as children, as a game which they

thought to enjoy with the inspectors. But the determination displayed by the department in spite of every baffled effort and the large number of prosecutions successfully undertaken apparently made the game too costly for most resistants, for testimony from the same sources indicates a great falling off in such tactics. Yet there still appear to be a few who seek to evade the law as far as they can.[5]

Another source of resistance to the law is the sympathy for the poor, in the absence of any provision to supply their needs while their children are kept from work. This influence will be plain from a foregoing criticism of the present law for lack of provision for cases of hardship.[6]

The influences resisting an observance of the law, when written by themselves, appear large. But in fact the balance between them and the influences supporting a good enforcement of the law is very much on the side of a high degree of observance. The present period is distinguished from the preceding one by nothing more than by the force, alertness, and universality of the opinion in behalf of the law.

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[5] In examining the evidence pertaining to this matter, the writer has distinguished between the loosely formed, indefinite, and general assertions, which everywhere circulate in factory towns among all kinds of people, and specific cases cited to him with particulars. Not all of the latter, even, can be taken without some reservation. According to the former, the inspectors have always been and are still everywhere and always fooled. That is far from true. But a consideration of the latter sort of evidence, after allowing for varying reliability, has satisfied the writer that much effort was made, and not without success, to hoodwink the inspectors for a while, but that the persistency of the inspectors and their usual ultimate success has convinced many resisting persons of the futility of their course. The writer has not been convinced, however, that this resistance has ever been true of employers as a class during the present period, or that it is true at the present time of more than a very small number.

[6] See above, pp. 118 *et seq.*

*Minimum Age Limit.*—With the public mind in such a temper, a good observance of the law would be expected. And that is found. The newspapers during the first six months of the law were full of accounts of the discharge of children from factories. These usually employed a round number, well above the truth, to describe the event. But the fact of the discharges to an unusual degree may be noted regardless of the exaggerated reports of the fact. The child labor committee of the Essex Trades Council reported that the law was well observed in Essex County, which contains the large manufacturing city of Newark.[7] Mrs. Florence Kelly wrote that the new law was unquestionably obeyed in the glass factories far more than any law had ever been before.[8] The city clerk's office at Newark felt a new and extraordinary demand for birth certificates from the public registry.[9] The glass factories suddenly found themselves put to it to find boys enough over fourteen years of age, so great was the number who were discharged as being under the age.[10] Woodbury, a glass manufacturing town, closed its night schools because the former night school pupils had entered day schools. This was said to be a common experience in the South Jersey towns.[11]

The most comprehensive testimony to the observance of the law is found in the results of an inquiry by Mr. Hugh F. Fox, made in 1905. A list of questions on the operation of the new law was sent out to superintendents of schools in all the various cities, and also to others who

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[7] *Essex County Observer,* June 26, 1905.

[8] *Charities,* XIV, p. 798, June 3, 1905.

[9] *Newark Evening News,* Sept. 6, 1904.

[10] This was reported at the time in various papers. It was also stated to the writer in every interview with glass factory officials.

[11] *Newark Advertiser,* Dec. 4, 1904. See also *Message Gov. Murphy,* 1905, p. 15.

were dealing with children of the poor, such as child-caring and charity organization societies, probation officers, truant officers, and priests whose parishes included large parochial schools, and some of the best informed clergy of other denominations, and labor leaders. "Replies to these questions indicate that, so far as their observation and experience extends, the persons to whom the inquiries were addressed are substantially convinced that the child labor laws are being enforced with remarkable thoroughness."[12]

This favorable testimony must be offset by some of a contrary sort. Contrast with former conditions made the success attained under the new law so conspicuous that it was the only thing noticed for the first six months or year. Then it had come to be taken somewhat for granted and violations were noticed with more attention. From the middle of 1905 on, the newspapers contain items and editorial comments alleging violations of the law. But these cannot be entirely relied upon. More trustworthy are a few early statements by other observers.[13] With the progress of time, complaints of violations were made with more deliberation. Mr. Fox said in December, 1907, that there was need of a more rigid enforcement of the law. The New Jersey *Review of Charities and Correction,* in an editorial of January, 1908, reflected complaints of a greater disregard of the law in the

[12] *Annals Amer. Acad. Pol. and Soc. Sci.,* Vol. XXV, May, 1905.

[13] The superintendent of schools at Millville in 1905 and 1906 showed skepticism of the observance of the law in that city. (*Rept. Supt. Pub. Instr.,* 1905, p. 135; 1906, p. 133.) The inquiry by Mr. Fox, referred to above, showed that the school superintendents of Bridgeton, Orange, and Perth Amboy did not think the law well enforced in those cities, although they were the only superintendents so reporting. Replies from others than superintendents of schools contained two to the effect that the law was not fully enforced, but they did not definitely reveal more than meagre violation.

glass factories.[14] The president of the Federation of Trades and Labor Unions in his annual report to the convention in August, 1907, said that in spite of prosecutions by the Department of Labor, illegal employment of children was still practiced in certain sections of the state.[15]

As to conditions at the present time, the writer has encountered widely varying opinions. Wage earners, trade-union officials, workers in charitable organization and philanthropic and civic societies, business men, clergymen, school officials, all are divided as to whether the law is being violated or not in their own localities. It would be bootless to repeat all this testimony, especially as much of it must be rejected. The valuation of it may be passed over for the moment until some considerations affecting any judgment are noted.

Before drawing any conclusions in this matter, it is due the reader to give some index of the unreliability of much of the testimony commonly offered on this point as the basis for judgments of the observance of the law. Many complaints of violations are worthless on their face. Some complaints show plainly an ignorance of the requirements of the law and charge as violation cases that are clearly outside of the law. Some charges are plainly so exaggerated as to appear to be made without any regard for the actual facts, but rather as sweeping general charges unrelated to specific cases. Many of the allegations of violation are but repetitions of a tradition concerning particular factories which won a bad name in years gone by. At times, charges have been made purely for purposes of agitation.[16] Many charges are carelessly,

[14] Vol. VII, p. 17.

[15] *Proceedings Conv. 1907*, p. 10.

[16] One labor leader publicly charged that the law was altogether disregarded in the glass factories. When asked by an inspector

if not culpably, made by persons without any adequate opportunity to observe the facts or without any effort to investigate and distinguish appearances from the truth.[17] The writer himself was regaled with a great many tales of wholesale violations, of which his informants, when pressed for more particularity, proved to have no personal knowledge, or any indirect knowledge of any specific cases, or any other basis worth considering for the large assertions so confidently made. Yet it is out of such as these, as well as *bona fide* violations, that rumors grow and circulate in a locality and are finally repeated or published throughout the state.

Most complaints of violation made in good faith are based merely on observation of children as they enter or leave a factory. Children are seen who appear to be under age, therefore it is charged that violations are practiced. This sort of evidence, however, is wholly unreliable taken by itself. Working children include so many who have grown up without proper care or nourishment that the appearance of children about a factory is very deceitful as to their true age. Charges of violation, based on this sort of evidence, cannot be considered

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afterward for specific references so that investigation might be made, the leader replied that he was only creating a sentiment.

[17] A clergyman, who had taken part in the agitation against child labor, publicly stated before an annual meeting of the New Jersey Conference of Charities and Correction that there were hundreds of cases of illegal child labor right in Newark. A factory inspector who was present asked him at the close of the session if he was speaking of facts of which he knew. He hedged in replying and confessed that he was speaking only from hearsay and supposition. An inspector, who has been given many of the cases of alleged violation, reported by various persons, to run down and verify, said to the writer that only a very few indeed of such complaints ever prove to have any basis in fact. A number of specific cases described revealed the most flimsy grounds and most ill-considered conclusions from them.

in any careful attempt to estimate the degree of observance secured for the law.[18]

These facts have required that a great deal of the testimony that has come to hand, both published and oral, be rejected; and have tempered the positiveness of the conclusion drawn from that which has been retained.

The interpretation of that evidence has been influenced also by the writer's own observations, made partly in company with inspectors and partly alone. Those observations may be summarized in a few sentences. Some thirty factories were visited, ranging from the largest to the smallest, and including six glass factories ranging from one with but one "tank" to the largest two in the state. In selecting these thirty factories it was endeavored

[18] The writer's experience with this sort of evidence may be worth recording. A certain textile mill had been named by several persons as a persistent and wholesale violation of the law. The writer was told that if he would watch that factory dismiss he would see in the size of the children positive proof of the charges. He stood at the gate and watched the employees enter one morning and counted twelve children who, on their size and appearance, he was sure were under fourteen years and some he thought as low as twelve. When later in the forenoon he met by appointment one of the lady inspectors, he requested that the textile factory in question be visited. In this inspection, the names of seventeen children were taken whose appearance was suspiciously young. Of these seventeen, there were eight or nine whom the writer positively remembered as having seen enter in the morning. These at least were not "concealed" from the inspector. Judging by the number of young looking children found in the factory as compared with the number seen to enter, there was no probability that any were concealed. As child after child was added to the suspicious list, the writer began to think that the charges he had heard were going to prove true. On looking over the file of papers in the office, however, satisfactory papers were found for every one of the seventeen, except one girl whose affidavit was accompanied by no supplementary evidence. At the direction of the inspector, she brought a birth certificate the next morning. A baptismal certificate for one boy made him out to be sixteen years old, which seemed incredible. To satisfy the doubt, recourse was had to the local rectory from

to choose typical industries and to include those establishments popularly branded as the worst offenders. In ten of these the children were noticed individually and the names were taken of those appearing young for examination of their papers on file at the office. In only three cases were the proper papers wanting, in two of which they were on hand for the inspector the following day. The third case was that of a boy under fourteen in the office of a manufacturing concern. The proprietors had not observed that the law applied to children in the office as well as in the works of a factory. This boy's discharge was ordered by the commissioner of labor and promptly effected. Want of time forbade such a detailed inquiry in all of the places visited. But notice was taken of the size and appearance of children and comparison made with the appearance of those children whose papers had been examined. In all these remaining factories together, not as many children of suspicious size were found as in two textile mills where a careful and individual examination proved all to be of full age. The writer

which the certificate was issued. The registry of baptisms for the year alleged showed the entry of the boy's name as stated in the certificate.

There was left this possibility of deceit. The papers filed in the office may have been issued to other and older children and transferred to those in the mill who assumed the names in the papers. Aside from the great improbability of so many children working in the same place under such a transfer of papers, was the experience of this particular inspector in running down just such remaining possibilities by looking up the family. On that experience, the chances were small that any of those in the mill would be found inaccurate. Reluctance to spend more time on the matter caused the writer to let that chance go unverified. This test, with a similar one on nearly the same scale in another mill in the same section, and the examination of a large number of papers in other sections, have satisfied the writer that the age of working children cannot be told with any reliability by the method of examining the teeth, so to speak.

does not say that there were none under fourteen years among these unexamined cases. He should want to verify each case first. But in the light of his experience with the appearance of children, he is far from asserting, without such verification, that any of them were under age. The chances are that not more than a very few, if any, would have proven too young.

It is not probable, as some will object, that any children were concealed. The writer, unaccompanied by any inspector, offered no occasion for fear on the part of any employer. Besides, while shown every courtesy, in most cases no apparent attention was paid to him as he loitered through the shops. Indeed, in one glass factory, with as bad a name formerly for child labor as any concern in the state, he was promptly given a pass and told to go where he wanted, the superintendent excusing his apparent lack of courtesy on the ground of a pressure of interests at the time requiring his attention.

The writer does not regard his own observations as sufficiently comprehensive or sufficiently minute in all cases to support of themselves any very positive general statement on the observance of the law. There is too much assertion of that sort after a running survey of a few spots in the field. It should be noted also that these observations were made in the summer and fall of 1908 when industry was still suffering from the depression. Especially in the glass industry was employment greatly reduced. Boys are usually at a premium in glass towns, but the writer was everywhere told that the slack times rendered more boys available than were needed. The usual pressure to take children under age was thus absent. The testimony from various persons leads the writer to think that he saw the factories in a better than average condition as to the employment of children.

When all this evidence is gathered together and weighed, it indicates, in the writer's opinion, that, with the cleaning up of the inspection department begun under Mr. Swayze, there began a rapid improvement in the observance of the law, which was continued as rapidly in the early years of the present law and has maintained a slower but steady improvement ever since. At the present time, it indicates a close, though hardly a complete, observance of the law.

Some statistical indication of the observance of the law is found in the fact that in the first of fourteen months of the law's operation some 7000 affidavits and accompanying papers were sent to the department at Trenton.[19] Of these, 3000 were sent in the first two months.[20] These would be large the first year because all children between fourteen and sixteen would be required to have them. That the new generation of factory children reaching the age limit each year has also complied well with the law is indicated by the fact that, since the beginning of the law's effect, some 26,000 such papers have been submitted to the department, of which 7000 were submitted during the year 1908-1909.[21]

Another index is found in the statistics of employment of children under sixteen. The following table affords a comparison between the year 1900 and the year 1904. The act of 1904 did not take effect until September 1 of that year. But the act of the previous year, raising the age limit to fourteen years for boys as well as girls, was in effect and the more vigorous enforcement of the law under the present commissioner of labor had begun.

[19] *Rept. Dept. of Labor,* 1905, p. 4.

[20] *Rept. Insp. Fact.,* 1904, p. 5.

[21] See above, p. 105 *et seq.*

## TABLE XIV.

CHILDREN IN MANUFACTURING IN 1900 AND 1904.

| | Average Total Employees[1] | | | Children under 16 yrs.[1] | | | Per cent Children Under 16 yrs.[2] | | |
|---|---|---|---|---|---|---|---|---|---|
| | 1900[3] | 1904 | Per cent Increase | 1900[3] | 1904 | Per Cent Increase | 1900 | 1904 | Per cent Decrease |
| Whole State | 213,975 | 266,336 | 24.5 | 7832 | 8002 | 2.2 | 3.6 | 3.0 | 16.6 |
| Urban | 163,037 | 200,711 | 23.1 | 5383 | 6453 | 19.9 | 3.3 | 3.2 | 9.09 |
| Rural | 50,738 | 65,625 | 28.8 | 2449 | 1549 | -36.8 | 4.7 | 2.3 | 51.0 |

[1] Census of Manufactures, 1905, Pt. II., p. 645.

[2] Computed by the writer.

[3] These figures for 1900 are somewhat smaller than those reported in the Twelfth Census. This is due to a selection to make the 1900 returns comparable with those of 1905. The census of 1905 omitted all the small establishments and took account only of the larger ones. These numbered 7010. For purposes of comparison, only those establishments reporting in 1900 were taken which were comparable with those reporting in 1905. These aggregated 6415 out of the 15,481 reported in 1900. But the totals for employees are only slightly lessened thereby.

The change in some of the principal child employing industries is shown in detail in the following table.

## TABLE XV.

CHILDREN IN SELECTED INDUSTRIES IN 1900 AND 1904.[1]

| Industry | Average Total Employees | | | Children under 16 yrs. | | | Percentage of Children Under 16 yrs. | | |
|---|---|---|---|---|---|---|---|---|---|
| | 1900 | 1904 | Per cent Change | 1900 | 1904 | Per cent Change | 1900 | 1904 | Per cent Change |
| Cotton Goods | 5518 | 5362 | —3 | 641 | 498 | —22 | 11.6 | 9.2 | —11 |
| Dying and Finishing | 7074 | 7597 | +7 | 168 | 119 | —29 | 2.3 | 1.5 | —35 |
| Glass | 5383 | 5507 | +2 | 847 | 568 | —33 | 15.7 | 10.3 | —35 |
| Hosiery and Knit Goods | 1841 | 1742 | —6 | 152 | 73 | —52 | 8.2 | 4.2 | —49 |
| Linen Goods | 1476 | 1827 | +24 | 316 | 346 | +9 | 21.4 | 19.0 | —12 |
| Silk and Silk Goods | 24,157 | 25,481 | +5 | 1199 | 1173 | —2 | 4.9 | 4.6 | —6 |
| Cigars and Cigarettes | 1640 | 6073 | +270 | 79 | 351 | +344 | 4.0 | 5.7 | +42 |
| Woolen Goods | 2942 | 2676 | —10 | 187 | 157 | — 16 | 6.0 | 5.8 | —4 |
| Worsted Goods | 3910 | 6024 | +54 | 456 | 616 | +35 | 11.6 | 10.2 | —12 |
| All Industries | 53,941 | 62,289 | +15 | 4045 | 3901 | —4 | 7.5 | 6.2 | —18 |

[1] Figures for 1900 from Twelfth Cen., *Mnfrs.*, Pt. II., pp. 548-54; for 1904, from Cen. *Mnfrs.*, 1905, Pt. II., p. 674 8. The percentages were computed by the writer.

A comparison between 1904 and subsequent years is found in the following statistics for fifty-six industries collected by the Bureau of Statistics and published in its annual reports.

TABLE XVI.

CHILDREN IN FIFTY-SIX INDUSTRIES, 1904-1908.[1]

| | Average Total Employees | Average Children Under 16 Years | | |
|---|---|---|---|---|
| | | Number | Per cent of Total | Per cent Decrease of Proportion[2] |
| 1904 | 147,488 | 6550 | 4 4 | . . . |
| 1905 | 165,499 | 6095 | 3.7 | 17. |
| 1906 | 175,338 | 6188 | 3.5 | 6. |
| 1908 | 181,822 | 5022 | 2.7 | 22. |
| | | | | 38.6[3] |

[1] Compiled from *Repts. Bur. Stat. of Labor and Industry.*

[2] Computed by the writer.

[3] From 1904.

Reviewing this evidence leads the writer to the conclusion that the present age limit is observed to a very high degree. In the case of such a law as the one in question, there are many who will observe it as law-abiding citizens because it is the law. Others will obey it because they do not wish to take any chances whatever by disregarding it. Many others are willing to take chances, but with widely differing amounts of daring. The number of these who observe the law thus varies with the risk of incurring the penalty. Then there are, finally, those who study ways to evade the law. Considering all together, there is an increasing intensity of resistance to the law as one passes from the first named to the last named, and even from one to another in each class. Each new conquest for observance against this rising resistance is at the expense of an increased pressure for en-

forcement by the various elements in the state pressing toward that end. It is probably true to say that the resistance, and hence the compelling force necessary to overcome it, increases more than proportionately with each degree of advance toward complete observance. Now there is a limit to the expense which a state will incur in providing for and equipping a force of officers to carry out its policy, and there is a limit to the perfection of the personnel possible under existing political traditions and political habits of mind. In both these respects, as concerns the child labor law, New Jersey stands fully as well as any other state. Yet it would not be possible, with the present provision of numbers and quality, relatively excellent as it is, to secure and maintain a complete observance of the law. What alone is possible is to cut down the amount of illegal child employment to that irreducible minimum set by all the conditions of the time. That is the answer alike to those who would say there is no child labor in New Jersey and to those critics who complain that it is not yet entirely suppressed. The writer is not convinced that there is no child labor. That there is some is proven by the fact that it is necessary to discharge some children each year.[22] It is probable that there will always be some, because each new generation of factory children each year contains

[22] Each succeeding year a new group of children grow within chance taking distance of the age limit. Some of these are bound to take the chance of being caught, even though the work of inspection be at the best possible. A certain number of illegal cases, therefore, will be found and discharged each year. The record of discharges, according to the reports of the Department of Labor, is as follows:

| 1904-5 | 1905-6 | 1906-7 | 1907-8 | 1908-9 |
|---|---|---|---|---|
| 238 | 361 | 399 | 195 | 260 |

This, of course, is not the number illegally employed at any one time, but the number found during the year.

many whose parents will insist on trying their shrewdness against the enforcement of the law. But it appears that the observance secured has reduced the amount of child employment close to that irreducible minimum which must be accepted for the present.

*Hours for Children.*—Not so much attention has been paid to the enforcement of the provision on hours for children as to the enforcement of the age limit. This has been due to the policy of the commissioner of labor to take up one feature of the law at a time.[23] In the spring of 1908, however, the commissioner began a campaign to enforce this section. He sent a circular letter to each employer in the state calling attention to the law and informing him that the department proposed thenceforth to hold employers to the requirements of the section.

So far as the length of the regular working day is concerned, the law has been very nearly observed, without any action by the Department of Labor, because the ten hour day has come into almost general vogue. The violation of the law has been almost wholly in exceeding fifty-five hours a week and in employing children, with the rest of the working force, when running overtime. Yet even in these respects many employers had already adopted a schedule within the law and many others promptly complied with the law when it was passed. That there have been numerous violators through overtime employment is, however, certain. In the first year of the law, the Consumers' League of New Jersey found within a week's inquiry in the northeastern part of the state sixteen factories which were or had been recently violating the law.[24] Similar testimony was given the writer for other sections.

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[23] See above, page 155.

[24] *N. J. Rev. Char. and Cor.*, IV, p. 155, June-July, 1905.

Since the action of the Department of Labor in 1908, there appears to have been a noticeable readjustment by manufacturers to comply with the law. The commissioner of labor says that manufacturers have responded to the requirements of the law very generally, though not without vigorous protest on the part of some against the fifty-five hour week.[25] As to that the commissioner took the ground that he had no authority to set aside the requirement but must exact it as long as it was in the law. All the protesting employers accepted the situation. This statement as to recent compliance is corroborated by much that the writer heard in different parts of the state. He found a number of manufacturers who said they had adjusted their work so as to dismiss all children at the end of the prescribed limit of hours. Several manufacturers, who could not make a satisfactory adjustment of that sort, entirely dispensed with all help under sixteen years. Similar testimony was obtained from employees. All of this points to a very general observance of the law. Yet there do not lack complaints of intermittent violation under the stress of urgent orders requiring overtime work.

The limitation of weekly hours and night work for children in mercantile employments received no attention from the Department of Labor for a while because, in the opinion of the commissioner of labor, the force of inspectors was inadequate to carry successfully the additional work that law would require,[26] and because there was a

[25] See below, p.

[26] *Rept. Dept. of Labor,* 1907, p. 8; 1908, p. 12. Two new inspectors, one a man and one a woman, were authorized in 1908. But the man was not appointed until June and then had to take the place of an old inspector who had been inactive for a time on account of poor health. The woman was not appointed until September.

prospect that a more comprehensive bill affecting child labor in mercantile employment would be introduced at the next legislature. In his report for 1908, the commissioner announced that he was prepared to take up the enforcement of this law.[27] In his report for 1909 he writes that he found "very little violation" of the fifty-eight hour limit for the week, but that on the one day a week when the limit is extended to nine o'clock[28] there is a tendency to stretch the hours to ten-thirty. The writer frequently met the opinion a year and a half ago that the larger establishments conform to the law without pressure, but that smaller firms offended grievously by employing children under sixteen late in the evening. He was not able, however, to check up the observance of the law on his own account. The enforcement of this law will meet great difficulties from the smaller stores. To watch every corner grocery and dry goods store during the evening would keep the whole force of inspectors busy. It is doubtful if this law can secure a wide observance unless local public sentiment gives constant assistance to the department.

*Health and Safety.*—There is little to be said on the observance of special provisions for the health and safety of children because those provisions are so few and so general. The protection actually enjoyed by children comes almost wholly through the general provisions for the health and safety of factory employees.

*Compulsory Attendance.*—From newspaper accounts and from more deliberately prepared items in the reports of the Superintendent of Public Instruction and in the New Jersey *Review of Charities and Corrections*, it appears that the more intensive activity to enforce

[27] Page 12.

[28] See above, p. 89.

the law has brought a correspondingly increased attendance at school. This can be said without qualification. But the improvement in attendance has not been any more than corresponding to the efforts at enforcement. The results have been greatest, naturally, where the efforts were greatest. If an attempt be made to state an average result for the whole state, the most that can be said is that those children who get on to the school rolls, either voluntarily, or through report of the Department of Labor as having been discharged from the factories, or because they happen to run afoul of the truant officer, are kept in regular attendance. But, with a very few notable exceptions, there has been little serious endeavor to hunt up children within the compulsory age to get them onto the rolls and keep them in attendance. The situation, however, is gradually improving. It may be said, by way of summary, that New Jersey has set a rather advanced standard for school attendance and is slowly moving over the long road toward that distant goal. But, as yet, one can find all degrees of backwardness in seriously setting out on the journey, which is truly no Sabbath day's journey for many communities.

# CHAPTER X

## SUMMARY AND PRESENT OPINION

During the period from 1883 to 1904 there was expressed for the first time a measurably strong and persistent sentiment for the restriction of child employment. Yet it lacked much in knowledge of its task, in steadiness, and in universality. This will appear from a consideration of the attitude toward the policy of different elements of the public. Beside the children themselves, the most directly interested were the employers and the parents of the children affected. There has already been noted the opposition from interest which was displayed by employers during the legislative history of the law. This antagonism, with much annoying indifference, continued to be shown by many of them to the law in operation. The first report of the factory inspector said that some manufacturers had complied with the requirements of the law on receipt of his notice calling their attention to it, but many of them had treated his warning with indifference. Some said other labor laws were not enforced, hence they did not expect this to be. Others said they were violating the law at the solicitation of parents and guardians. Quite a number expressed approval and sympathy with the law, but feared it would not be enforced uniformly and so disregarded it themselves. The inspector said these were very pronounced in their position.[1] After two years the inspector found the attitude more hopeful, for he reports that he met among employers "as a rule, a dis-

[1] *Rept. Insp. Fact.*, 1883, p. 4.

position to obey the laws."[2] Yet, notwithstanding the many expressions of approval, there is noticeable among employers during these early years an utter lack of sympathy with the object of the policy and open dissension from the project. There was a want of sensitiveness to the plea for the conservation of the adult's resources in his childhood. There is nothing in the present attitude toward child employment to be more remarked than the difference between the instinctive position of the employer of today and that of the employer of a quarter of a century ago.

Equally insistent, though far less influential, dissenters were the parents of children affected by the law. Expressions of this opposition are found in the early reports of the Bureau of Statistics. The inspector also records their protests. This was not universal among parents, however. For among the protests are found numerous expressions of approval even by some who would find the earnings of their children a great help in maintaining the family.

Another group of dissenters, but without direct interest, was those who pleaded the necessities of the poor. In the absence of any other known and practicable means for contributing to the support of the children affected, or of their families, this consideration took hold of a large number of people of the day. This group was probably larger than either of the others, but was not nearly so assertive.

Against this opposition the state committed itself to the policy of restricting child employment. But this it did chiefly under pressure from the labor organizations.[3]

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[2] *Rept. Insp. Fact.*, 1885, p. 26.

[3] This seems to be indisputable, although the writer has not succeeded in finding much material bearing directly on the point. None of the publications of the labor organizations appear to have been preserved in any place of access anywhere in New

Aside from those, the writer found no evidence of organized agitation in support of the policy. The sentiment of the public in general seems to have been without leadership of its own. It is extremely doubtful whether it would have developed the resolution and organization needed to embody itself in a policy of the state if it had not been for the leadership, however imperfect, of the labor organizations. It was they that were most instrumental in stirring up the agitation to which the general sentiment lent sometimes its support, sometimes merely its approval. It was responsive to an agitation for a declaration of policy but not to the unemotional pleading for constant pressure on the administrative department to carry through the purpose of the enactment. Its resolution was strong when the principle was at issue, but when the excitement of contest was over, its will power was weak in the commonplace, day to day drudgery and antagonisms of seeing that concrete conditions conformed to the principle. Such enterprise in the enforcement and such success in results as was shown in the first half of the period was due almost entirely to the fact that the chief inspector and his first assistants were fully in sympathy with the policy they were supposed to enforce. When the state government changed its political faith about midway of the period,

Jersey, and several labor leaders consulted knew of no one having them. But a few newspaper notices of the leading part taken by labor officials, some entries in the legislative journals, testimony in the early reports of the Bureau of Statistics, the fact the first inspector credited much of his assistance to the labor organizations, the traditions still current and the want of any contemporary evidence of any organized activity by other groups all point to the leadership of the labor unions. This was quite probable because the organization of the Knights of Labor in New Jersey dates from the last of the seventies, and the present State Federation of Trades and Labor Unions had its origin in 1879.

the public interest was not sufficient to insist that the inevitable change of inspectors should be made without sacrifice of efficiency. For the rest of the period, the chief inspector lacked aggressiveness and interest, and the deputies' positions were filled solely with regard to political exigencies. The labor organizations kept up a protest and attempted to secure an improvement. But organized workmen were now much less politically important and could do nothing without the support of the public at large.

When put into a consecutive statement, these shortcomings fill the view of the policy during the period before 1904. But they should not be allowed to obscure the fact that the policy did have considerable force while in the hands of a sympathetic and willing department for enforcing it, and that success to an important degree was realized. To the positive side of the account, therefore, should be credited the force of precedent, continued through twenty years, in all the elements of the standard of the policy and in the maintenance of a force of inspectors for enforcing it. There was also the stimulation from the taste of success during the first part of the period. All this inheritance enabled the advocates of the policy during the next period to set out from a more advanced position than would otherwise have been possible.

The present laws affecting the employment of children stand in striking contrast to those which preceded in respect to the deliberation and careful consideration of all interests with which they have been framed. This is due to the manner in which they were drawn. Previously, the various advocates of such legislation presented bills to the legislature, each embodying the special idea of its originator without necessary reference to or

consistency with the other measures or with existing laws. Also, most of those who drew such bills had no knowledge of the technique of administering the policy they advocated, or of the economic consequences of such laws, and, therefore, of the points where obstacles to the success of the policy would appear. A similar lack of knowledge of the business problems of employers prevented them from giving due consideration to the claims of those whose interests would be closely affected by the policy. These unrelated bills had to be hammered together in legislative committees. There the opposition of interested parties, intent only on protecting themselves, and inconsiderate of the social interests urged in support of the bills, added to the difference between the original proposals, inevitably prevented the construction of a well considered and consistent measure.

In the case of the act of 1904, the powerful public sentiment pressing for a more effective policy was as much divided as ever on the details of the law by which to realize such a policy and in its practical knowledge of the technique of such legislation. Moreover, powerful interests were intrenched in the legislature. In this case, however, the state administration was aggressively in support of the purpose of the agitation. The strategic advantage of the Governor in pressing legislation enabled him to provide a point of convergence where the different elements of the public sentiment could meet and reduce themselves to agreement with ample deliberation before going to the legislature to press their policy. It also permitted a full statement of the claims of employers and others in interest to be brought to the consideration of the advocates of the law before they committed themselves on details of the measure. Much opposition in the legislature was thereby forestalled and many de-

mands, productive of contention and bad spirit, were checked. Then also, the reduction into legal form of the points of compromise and adjustment was done by a lawyer with full consideration of legal consistency and constitutionality. When the bill, framed up in such a manner, was presented to the legislature, the advocates could join with the Governor in urging it and in opposing any amendments. Its passage without substantial change is due chiefly to this united support of the original form of the bill.

The attitude of various classes toward the laws affecting the employment of children is generally favorable. When the law was passed, there was much fear on the part of many employers that the use of older children would seriously increase their costs. This has not been the result as a rule. Many employers interviewed confessed that their early judgment of the effect of the law was erroneous. Few of them found that the displacement of the children under fourteen by older children had any important effect on their business. The only important exception to this found by the writer was in the glass industry, where almost every official interviewed said that the law had most seriously interfered with the business. Most of them, however, have adjusted themselves to the change and now accept the law with approval, although it still creates a scarcity of boys. The employers throughout the state, as a class, especially the larger ones, look upon the policy of the state approvingly and are desirous of obeying the law implicitly. Antagonistic opinion is found for the most part only among petty employers and subordinate bosses in large establishments. Yet there are some employers who frankly say they believe early employment for most children is the best discipline for them, is unharmful, and ought to be permitted.

Such opposition as appears by employers to the age limit is directed mainly at the form of evidence required for children and at the trouble incidental to being careful that a child has the proper documents. This has already been discussed. Another point of opposition is the fifty-five hour week for children under sixteen. This has been severely challenged by many manufacturers. In the case of those whose product is subject to a very seasonal demand, a great inconvenience is encountered because of the law. Their customers must be accommodated in rush seasons or orders will be taken away in other seasons. And the most practicable way to fill rush orders is by working overtime. Larger plants could be provided, though at an increased proportionate cost of investment, especially during those seasons when running far below the enlarged capacity. A more difficult obstacle is met in the inelasticity of the labor supply and in the increased labor cost of new employees, due partly to the lower efficiency frequent among those available at the time, and partly to the less developed organization possible with new hands.

But in the opinion of one large employer of children, the source of the opposition to this law is much more in the ambition of manufacturers to enlarge their business than in the exigencies of seasonal demand. Many of the opponents of the law are not subject in their business to much variation in demand on account of seasons, and the most open expression of opposition has been against the restriction of the fifty-five hour week, which does not permit New Jersey manufacturers to run as much time as competitors in other states. In Pennsylvania, the nearest competing state, the week allowed for children is sixty hours. That amounts to a difference of one month in a year, or, as the New Jersey

complainants put it, to one-twelfth less business possible to them than to manufacturers in Pennsylvania.

The law is defended as against this opposition as being a necessary restriction in the interest of children to which industry must adjust itself, just as it has to adjust itself to other conditions uncontrollable by manufacturers. The interest of the manufacturer in the more or less of his business and of his profits must effect a compromise with the interest of the children whom he employs. The latter, as well as the former, must be given consideration in his calculations according to its importance. If that entails sacrifice of business, it must nevertheless be accepted and taken for granted just as he accepts limitation of business from other uncontrollable factors affecting his enterprise. This defense must be conceded by everyone who is at all sensitive to the injury which unlimited hours of labor bring upon children. But a point of dissension remains in the question as to how much consideration each interest deserves. Most manufacturers are bound to value their interest unduly and most advocates of the child's interest are bound to overweigh his need of protection or have a too ambitious idea of the rapidity with which industry can be adjusted to their standards for protecting the interest of the children.

One attempt has been made to organize the employers' opposition to the law. When the commissioner of labor took up the enforcement of the fifty-five hour section of the law in the spring of 1908, the board of trade of Camden sent out in June a circular to the other boards of trade throughout the state to feel the temper of employers with reference to an agitation to change the law. It proposed to raise the question not only of hours, but also that of "some other of the obnoxious features of the

present law, such as the requirements of birth or baptismal certificates, passports, etc." If the replies warranted it, the president of the board of trade was authorized to call a conference of employers for the purpose of framing a law "which will be equitable and fair to employee and employer, to be submitted to the next legislature."[4] By October of 1908 only one reply had been received to the circular, and that was simply an acknowledgement of its receipt by the secretary of another board of trade.[5] Apparently the employers of the state as a whole did not feel the burden of this section enough to resist it. This opposition, however, is by no means vanished. It has again appeared in connection with the newly organized Manufacturers Association of New Jersey.[6]

The attitude of the parents of children is divided. Those of the poorer wage earners very largely resent the interference with their power over their children. This sentiment does not secure much public expression, though occasionally it appears in some form.[7] The plea is usually the necessities of poverty or large families. Many parents with better incomes also disapprove of the law, not because of family necessities but because they believe in a child, especially a boy, getting to work early. Going to school until fourteen years of age is to them foolishness. They also plead the hardships of poorer families. Other of the more comfortable parents accept the law on the ground of public policy. Organized

[4] Circular of Camden Board of Trade.

[5] Secretary of Camden Board of Trade to the writer in an interview.

[6] *Paterson Guardian*, Jan. 24, 1910.

[7] Unsigned letter from a workingman to a Paterson newspaper, reprinted in the *Boston Traveler*, Apr. 24, 1906.

labor, especially in its corporate expression of opinion and action, is in hearty approval of the law.

The general public is in thorough accord with the law. There can be no mistake about that. There are, however, many persons who take exception in varying degree to the present form of the law. The most important exception is to the lack of provision for families in poverty. This has already been noted. Less commonly met with is the feeling that there ought to be a wider choice of evidence of age open to parents. This has in mind only the forms specified in the law. It overlooks the unlimited choice of evidence that may be submitted to the commissioner of labor in support of an application for a permit. This matter also has been already discussed. The newspapers for the most part support the policy, although some are half-hearted about it. Some, also, approve the policy as an ideal to work toward, but think the present law is in advance of a just regard for all elements in the present situation.[8]

The aggressiveness and alertness of public opinion in favor of the policy is seen in the constant agitation for an extension of the law and in the quick detection of bills that would, designedly or otherwise, weaken it. The circular of the Camden board of trade immediately provoked newspaper attention and adverse comment and started the reorganization of the Children's Protective Alliance, so as to be prepared to meet the threatened reactionary movement.[9] In the 1909 legislature, a weakening measure was watched by friends of the present law, although it made no progress. Altogether it appears entirely probable that public sentiment is much

[8] For a good statement of this point of view, see a carefully written editorial in *The Trenton True American,* Dec. 10, 1906.

[9] *Newark Evening News,* June 20, 1908.

too virile to permit any weakening change in the law, although it has not been strong enough to carry through some of the extensions most desired by it.

There is agitation to extend the present policy to features of child employment not now affected by it. In most of these cases, the omission was deliberately made from the act of 1904 by Mr. Swayze for fear of jeopardizing the constitutionality of the measure. One of these features was an educational minimum to supplement the minimum age limit. This was strongly urged by many advocates. Against it was urged the practical problems of effective administration which have perplexed officials everywhere. Also was raised especially the question of the constitutionality of including an educational requirement in a factory law and the fear of in some way provoking friction between the school authorities and the inspectors. The administrative features of such a minimum requirement did not appear to the framers of the law to be sufficiently worked out. The omission has been severely criticised and discussed with reference to amendment of the law . But no vigorous and concentrated effort has been made to secure the change.

Another omission from the act of 1904 was that of mercantile and other employments from the operation of the law. This, too, was for fear of unconstitutionality. It was questioned whether the application to these employments could constitutionally be made in an act designed and entitled for the regulation of factory employment. Efforts have been made, as related, to make this extension by separate enactment, though not yet with success. The discrimination in the law, as it is, is frequently complained of by factory employers and admitted by advocates of the child labor policy of the state. There is a very general opinion indeed that the law should

apply to these other employments. But it has thus far lacked the enthusiasm necessary to press a bill through the legislature.

Another measure, frequently talked of but not yet systematically agitated or submitted to the legislature, is a centralized state force for administering the compulsory attendance law. This is the only means to a uniform observance of that law. But the difficulties in the way of such a scheme are many. At present, anyway, public opinion is not ready for such a move.

Excepting a few leaders among the trade unionists and philanthropic and civic societies, the aggressive interest in child labor legislation appeared, until the last legislative session, to have fallen off. The public, although sensitive to any attack on the present policy, appeared to be relaxed from the militant activity of a few years ago. Since then problems of the control of corporations and of governmental reforms have come to engross attention. Yet the interest in the extension of the child labor policy was latent and needed only an occasion to stir it to aggressive action. Such an occasion was presented in the form of the recent campaign for the bill against night employment which generated sufficient pressure to push that measure through. But public sentiment could not yet stir itself enough to include children in mercantile employments under its child labor policy.

The situation should properly be differently described. The child labor opinion of the people of New Jersey is not, truly speaking, declining in vigor. Recent events show that it is growing with that healthy, steady growth which gradually widens its understanding of the problem it has attacked and quietly accumulates strength for each extension of its policy. What appear to be lapses

into impotence are but the intervals of accumulating power after each conquest of strength. When its impatient leaders call upon it too soon to take a next step, it fails. It appears to be weakening. But in time it grows to the measure of the demands upon it. The proper criticism of the sentiment in New Jersey is not that it is disappearing, or that it is intermittent. The only criticism in point is that pertaining to its present attainments. Compared with a state like Massachusetts, New Jersey is not yet as sensitive to the needs of the problem it is called upon to deal with. But this criticism is mitigated in great part when it is considered that it became aware of the problem at all, in a state wide sense of awareness, only a half dozen years ago. Comparisons as to the rate of growth and thoroughness of such work as has been accomplished place New Jersey very high among the states of the Union. This suggests, however, another criticism, namely, that New Jersey people were far too long in becoming cognizant of the problem that was shaping itself among them.

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# THE AMERICAN SILK INDUSTRY AND THE TARIFF

by

FRANK R. MASON, A. M.

Sometime Austin Teaching Fellow in Economics
in Harvard University.

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## SUMMARY.

### PART I.

#### THE AMERICAN SILK INDUSTRY.

1. INTRODUCTION.
In all countries early silk manufacture has required assistance ........ 2
Causes which prevent the growth of the industry independently ........ 3
2. GENERAL VIEW OF THE INDUSTRY.
The great increase of Civil War duties........ 4
Amount of domestic production........ 5
Imports ........ 6
Relation of home production to consumption. Caution to be observed in interpreting figures........ 7
Different divisions of the industry........ 9

### PART II.

#### THE RAW SILK.

3. NATURE OF THE SILK FIBRE: EARLY SUPPLIES FROM THE ORIENT.
Differences between reeled and spun fibres........ 11
Importance to American manufacture of careful reeling.. 12
Silk "throwing" prepares the raw yarn for use in the loom 14
Difficulties arising from poor quality of Chinese silk..... 15
a. American reels in China, 1840........ 16
b. Troubles from adulteration........ 17
c. Unsatisfactory nature of Chinese yarns........ 18
Japanese raw silk in the seventies........ 18
a. Early difficulties........ 19
b. Efforts of Japanese to improve their product.... 19
Chinese and Japanese threads compared........ 20
Imports from China explained. Comparison of prices. Chinese policy........ 24
The London raw silk market........ 25
Asiatic and European threads compared........ 26
4. RECENT RAW SILK PROBLEMS: SERICULTURE IN THE UNITED STATES.
Imports of Italian yarns in the early eighties........ 28
American reeling machines in Italy........ 29

Importations from all countries in recent years: the policy of Japan .... 30
Sericulture in the United States. Difficulties .... 33
Raw silk culture in California and other states since 1860. 34
Efforts of the Department of Agriculture to foster sericulture since 1898 .... 36
Conclusions as to silk growing in this country .... 38

## PART III.

### Geographical Distribution of the Industry.

5. Early Centralizing Forces.
Connecticut's early manufactures .... 40
Spread of industry due to failing supply of domestic raw silk .... 41
Influence of imported supplies .... 42
Importance of proximity to New York City .... 43
Concentration in New Jersey after the Civil War .... 44
Factors acting on localization of laces, fringes, and trimmings .... 47
Experiment with Chinese labor, California, 1875 .... 49
6. Pennsylvania and the New Manufactures.
Revolution of throwing machinery and employment of children .... 50
Rush of manufacturers to Pennsylvania .... 51
Comparative advantages of central and isolated locations 51
Growth of New Jersey manufactures compared with those of Pennsylvania since 1890 .... 52
Numbers of men, women, and children employed in Pennsylvania and in the whole United States .... 53
Pennsylvania and New Jersey compared as to production of ribbons and broad goods .... 54
Problem of the future .... 55

## PART IV.

### Survey of the Rates of Duty Imposed by the Various Tariff Acts.

7. Legislation 1864-1883: Specific and Ad Valorem Duties.
The revenue duty of the Civil War .... 56
General ad valorem rate reduced from 60 per cent to 50 per cent in 1883 .... 57
Progress under lower duties .... 58
Comparison of ad valorem and specific systems .... 58
Defects of Act of 1883 .... 61
Attempts at specific schedule for silks .... 62

8. The Act of 1890.
The specific system in the House Bill .......... 64
Attempt to raise duties by a change of system .......... 66
Some duties raised apparently without cause .......... 67
Pile fabrics and lace duties .......... 68
Act of 1890 in the Senate. Reduction of rates .......... 69
The conference committee and the final bill .......... 70
The influence of J. and J. Dobson .......... 70
Results of Act of 1890 .......... 71

9. The Wilson Bill of 1894.
Political situation .......... 73
The House Bill—lower duties on silks .......... 74
The Senate amendments .......... 74
The contest over pile fabrics .......... 75
Causes of distress in pile fabrics industry .......... 75
Reduction of the specific rates .......... 78
Higher rates on velvets than on plushes .......... 79
Final outcome of Act of 1894 .......... 80

10. The Dingley Tariff of 1897.
Financial conditions. Higher duties .......... 81
Specific schedule on silks long planned .......... 82
Conditions in the industry analyzed .......... 83
Most lines of silk production were prosperous .......... 83
Extreme protectionist disposition of Congress .......... 85
Influence of the Connecticut manufacturer .......... 87
The Senate debate .......... 88
Flaws in the specific plan pointed out .......... 89
Final outcome .......... 94

11. Results of the Silk Rates in the Tariff of 1897.
Imports since 1897—their various amounts .......... 95
High rates on cheap goods, low rates on most expensive articles .......... 99
Some rates excessive .......... 100
Defective working of specific schedule .......... 101
Dress goods importations since 1899 .......... 102

12. The Tariff Act of 1909.
New schedule prepared by the Silk Association of America .......... 102
Increase in duties not protested .......... 103
General agreement as to advisability of a specific schedule 104
Specific rates now applied to spun silks, thread, and throwing silks .......... 105
Analysis of the re-classification of piece goods .......... 106

Reductions: lowering of the *minimum* on piece goods and velvets; lower rates on handkerchiefs ................ 107
Artificial silk; the principle of compensation ........... 108
Good features of the Act of 1909 ........................ 109

## PART V.

### Recent Changes and Present Status of the Industry as Regards Protection.

13. Americanization of the Industry and Dependence on Protection: Silk Throwing and the Thread Manufactures.
Revolutionary changes beginning about 1890 ............ 110
The industry becomes Americanized .................... 111
Thrown silks; new automatic machinery ................ 112
Thrown silks cheaper here than abroad ................ 114
Sewing silk—long independent of tariff ................ 116
Considerable amounts exported ........................ 117
14. Dependence on Protection: Comparison of American and European Methods of Production.
Industrial characteristics ............................. 117
Domestic as distinguished from foreign products ......... 118
The very cheap hand-loom products ..................... 118
The very expensive hand-loom products .................. 119
Machine-made products ................................ 121
Characteristics here and abroad ........................ 122
15. Dependence on Protection: Ribbons.
Growth of the American ribbon industry ................ 123
Great cheapening in cost of ribbon manufacture. American inventions ........................................ 124
Highly figured weaves more costly in labor .............. 125
The American manufacturer cannot diversify his patterns 126
Extent to which ribbon industry is dependent on tariff protection ........................................ 128
16. Dependence on Protection: Broad Goods.
Enormous increase in production ....................... 129
Improvements in American broad looms ................. 130
Protective stimulus, competition, and overproduction ..... 135
Some broad goods now made here as cheaply as in Europe 136
Certain kinds not suited to American conditions of production ........................................ 138
Conclusions as to dependence of broad goods manufacture on tariff ........................................ 141
17. Dependence on Protection: Other Fabrics.
Trimmings. Hand looms and power looms in America.

Distinction as to kinds that can be produced here and kinds that cannot .......... 144
Tapestries and curtains. Most kinds cannot profitably be made here .......... 147
Braids—history of their manufacture .......... 148
a. Adaptability of the various kinds of braid to conditions of production here .......... 151
Artificial silk .......... 152
Pile fabrics .......... 153
a. Decline in production of plushes .......... 155
b. Pile fabrics and protection .......... 156
Knit goods: conditions of production .......... 156
a. Underwear—difficulties of manufacture .......... 157
b. Gloves, mitts, hosiery—adaptability to production in this country .......... 158
Laces and their manufacture .......... 162
a. Decrease in production, increase in importations .. 163
b. Unsuitable to conditions of production here .......... 164
Conclusions .......... 164
18. Dependence on Protection: Various Opinions.
Opinions of manufacturers .......... 166
a. Always one-sided .......... 166
b. Mr. Cheney's arguments for protection .......... 167
c. The argument based on lower prices .......... 169
d. The "cheap labor" arguments .......... 170
Opinions of silk manufacturers .......... 170
a. American and European silks are two entirely different products .......... 170
Opinions of buyers .......... 171
a. Market demands for domestic and foreign silks .... 172
Personal experiences .......... 173
19. Conclusion.
Silk Industry due to protective tariff .......... 175
Serious obstacles to growth of industry .......... 175
The obstacles cleared away .......... 176
The American silk manufacture is still partly a young industry .......... 177
Bibliography .......... 179

## PROLOGUE.

Those who have become accustomed to look for certain landmarks in current literature dealing with the evolution of particular industries will in the present instance miss much that is familiar. It has been conceived that the growth of the American silk industry has been profoundly influenced by only a few important factors, which have accordingly been given separate treatment in the several parts. The history of the industry is therefore viewed in longitudinal sections and not in chronological detail. Problems of promotion and capitalization, of combination and integration, of the size of the industrial unit, so prominent in many cases, are held to have played a wholly minor part in the development of the silk manufacture. Questions of wages and labor supply and of the competition of the industry for the several factors of production, have been grouped for consideration as parts of the larger factors through which they have exercised their influence.

My thanks are due to the members of the Department of Economics of Harvard University for aid and encouragement during the preparation of this thesis. Especially am I indebted to Professor F. W. Taussig, under whose supervision the materials were gathered, for reading the manuscript and correcting errors of fact and expression; and to Professors E. F. Gay and C. J. Bullock, for many valuable suggestions as to arrrangement and form.

Frank R. Mason.

Harvard University,
December 22, 1910.

# PART I.

## THE AMERICAN SILK INDUSTRY.

### I. INTRODUCTION.

The purpose of this investigation is to consider the history and present status of the silk industry in the United States and to examine its relation to the customs tariff. Perhaps no better example of an industry created and built up under the stimulus of high tariff duties exists in this country. For this reason, if for no other, the issues involved are clear-cut and definite.

The question of the relations that exist between a protected industry and the tariff, however, is one that must be approached with singular care. This is demanded not only because of the magnitude of the interests involved, but also because of the wide divergence of opinion among economic students of the subject. Arguments that favor, and theories that oppose, protective duties as such are as old as the study of economics, yet we are almost as far as ever from any general concurrence of opinion on the matter. New light on the old question may perhaps be gained by attacking the problem in a different way,—by an inductive study of particular cases. An investigation of the American silk industry with this idea in view will be worth while, therefore, not only because of the interest and importance attaching to the subject itself, but also as throwing a side light on a much mooted question of economic policy.

That our silk industry may justly claim to be the direct product of a protective duty and a subsequent protective policy, no one can doubt. But this is not peculiar

to the American industry. Probably never since the Dark Ages has the manufacture of silks arisen in any state as a spontaneous or independent growth. In the Italian cities before the Renaissance period, where the industry first took firm root in Europe, its immigration from Asia Minor and Constantinople was attended by protection in the shape of gild privileges, freedom from tolls, and the like.[1] The famous industry at Lyons was the direct result of an Ordinance of King Louis XI, in 1464, directing the Lyonnese to set aside 2000 livres for the support of silk weavers and to offer attractions to master artisians to settle in Lyons.[2] In like manner the Prussian industry was propped and bolstered up by Frederick the Great.[3] In England the fabrication of silks was fostered by bounties, gild privileges, and protection from foreign competition, for over four hundred years, from 1454 to 1860.[4]

Although the initial expense for looms, the outlay for machinery, and the lack of technical skill have had their share in preventing the inauguration of this industry unaided, these difficulties are not insuperable. More serious is the fact that the raw material has to be imported from abroad and is extremely expensive. Above all the variable nature of the demand for an article that is by no means a necessity must always operate strongly against establishing the manufacture without assistance. It is true that considerable imports from foreign countries always precede manufacture at home; this might be considered to furnish a market; but this alone is not sufficient. Even after the use of silk goods has become

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[1] Robt. Pohlmann, *Wirtschaftspolitik der Florentiner Renaissance,* pp. 49, 50, 64, 74, 99.

[2] Godart, Ch. I.

[3] Schmoller and Hintze, *Die Preussische Seidenindustrie,* Vol. III.

[4] Cunningham, *Growth of English Industry and Commerce,* silk references. See also Allen, *Silk Ind. of World,* p. 53.

considerable, the demand will fluctuate so violently from year to year that a new industry can hardly hope to stand unassisted the strain of a series of dull years. Governmental powers do not always see this, and in years of active consumption wonder is expressed that home manufacturers do not take up so profitable a business. In fact, the starting point of government support to the silk industry has usually been a mercantilistic sense of uneasiness at the loss of money in payment to foreigners for an unnecessary article, a luxury pure and simple. Thus Louis XI in 1466 complained that "200,000 livres annually leave our kingdom of France in payment for these goods, which moneys we desire to retain at home."[5] These reflections led to the establishment of the industry at Lyons, a city which was already the center of the imported silk trade.

Even after the market is made and the use of the articles may be supposed to be established, nothing is more fickle than the demand for silk products. When the manufacture is firmly established it can withstand a period of slack demand: and one that reaches out to foreign markets may offset losses in one direction with gains in another. But the silk industry in its initial stages is the sport of every ill wind that blows. Subject to every whim and fancy of Dame Fashion, wide fluctuations occur from year to year, unpreventable and unforeseen. This year plushes are in favor, the next year figured broad goods; this year the velvet manufacturers are working their looms overtime, next year their storerooms will be clogged with surplus stocks. Add now to the ups and downs due to fashion those normal fluctuations attributable to the prosperity or depression of the country, and the result will

[5] See Godart, pp. 9-11.

show the wide range of the instability of the demand for silk goods. For when hard times come there are few things more quickly selected as suitable for curtailment of expenditures than the outlay for silken fabrics. Food, raiment, and shelter must under all circumstances be provided; it is only when people have a luxury fund at their disposal that their thoughts turn to unnecessary articles such as those derived from the cocoon of the silkworm.

These considerations explain why it is that official support and material encouragement have always been necessary before the initial steps could be undertaken. As applied to the United States, we see that on the whole it would be surprising if such a manufacture had grown up without the stimulating influence of a protective tariff.

## 2. A GENERAL VIEW OF THE INDUSTRY.

It is to the Civil War tariff that we must turn for an explanation of the imposing figures that represent the total annual output of American mills of late years. True, before that time there had been a moderate tariff, and there had been some slight production of silk goods in this country. Since 1824 the general duty applying on these products had ranged between 24 and 30 per cent, and a modest manufacture, consisting of thread and small trimmings, had sprung up. The census of 1860 shows some $6,000,000 (really $3,600,000) as the value of the American output of that year.[6] During the war, however, the tariff on imported silken fabrics, which had never been made here, was raised to an ad valorem rate of 60 per cent. Moreover, the speculative period following the years 1862 and 1863 greatly increased the

[6] U. S. Census 1860, pp. C-CI.

consumption of luxuries. These years saw the real beginnings of our silk industry. The Census of 1870 reports a jump in the output to $12,739,000 in value. These figures represent paper-money prices, and for this and other reasons are probably wide of the truth.[7] The Census of 1870 is so notoriously unreliable that any data based on its figures can not be trusted. Yet the growth of the industry from 1865 onward was at a very rapid rate, as is attested by the customs data for the imports of raw silk. As we shall see later,[8] all raw silk used in this country is imported. The imports of the raw material quadrupled between 1860 and 1870, hence it is fair to assume that the manufacturing industry increased several fold, if it did not actually grow to four times its previous dimensions. A reference to the tables of production for succeeding years shows that on the average the United States manufacture has, until recently, more than doubled for every decade, though the increase has not been at all uniform.

| | |
|---|---|
| 1860 | $ 6,400,000 |
| 1870 | 12,739,000 |
| 1880 | 41,033,000 |
| 1890 | 87,298,000 |
| 1900 | 107,256,000 |
| 1905 | 132,000,000 |

The foregoing figures for United States production include duplications. The net figures[9] are:

| | |
|---|---|
| 1860 | $ 3,800,000 |
| 1870 | 10,000,000 |
| 1880 | 34,500,000 |
| 1890 | 69,200,000 |
| 1900 | 92,500,000 |
| 1905 | 118,500,00 |

[7] Wyckoff, *Amer. Silk Manuf.*, p. 41, and *Silk Goods*, p. 5.

[8] *Infra*, pp. 12ff.

[9] *Census Reports* and *Statistical Abstract*. The net figures are obtained by eliminating from the gross results materials and products twice included.

Thus, in forty-five years, the home production, omitting duplications, has jumped from less than $4,000,000 to upwards of $118,000,000. In the first two decades it more than trebled. From 1880 to 1890 it more than doubled, and the increase since 1890, while not so great relatively, shows steady and continuous growth. The United States is now the largest silk producing country in the world.[10]

Perhaps the most striking illustration of the phenomenal growth of the American industry is revealed by a comparison of the figures representing respectively the home production and the imports from abroad. The importations have fluctuated violently from year to year, owing to causes already commented upon. On the average, however, the values of incoming goods have remained practically stationary for the past thirty-five years and stand today at very nearly the same figure at which they stood in 1873—about $30,000,000. The enormous increase in the use of silk goods in this country has been filled up almost entirely by the domestic product.

The following figures show the yearly production, importation, and the percentage of one to the other for the decennial years.

| | Imports | U. S. Production | Per cent home production to imports |
|---|---|---|---|
| | (in millions | of dollars) | |
| 1860 | 30 | 6.4 | 21% |
| 1870 | 25 | 12.7 | 50% |
| 1880 | 32 | 41.0 | 133% |
| 1890 | 38 | 87.2 | 215% |
| 1900 | 30.8 | 107.2 | 340% |
| 1905 | 33 | 132.0 | 400% |

These figures, taken from the census reports for the various years and the Statistical Abstract for 1906, would seem to indicate that of the home demand the home pro-

[10] *New York Times*, January 10, 1909. Letter of Mr. Charles Cheney of South Manchester to Mr. Carnegie.

duction satisfies at present about 85 per cent; but several facts that must be taken into consideraion affect seriously the accuracy of this statement. It must be remembered that the value of the imported goods is the official invoice made out and sworn to by the importer. The temptation to put the invoice below the real value is so strong that the undervaluation is often said to be as high as 25 to 50 per cent; though under the partly specific schedule that now applies on silk textiles this tendency is doubtless not so marked as it used to be. But even if we disregard altogether the underscaling of the import valuations, another and more important correction must be made before we can use the figures. The value of the home products is determined in the usual way by ascertaining the wholesale prices, the prices at which goods are sold by the manufacturers to the wholesalers or middlemen. This is not true of imported goods. Before selling them to the wholesaler here, the importer has to pay a heavy tax, and must sell his goods at an advance over the invoiced price sufficient to cover the customs duty. It must not be forgotten that the import statistics do not represent United States figures, but French prices, German prices, Italian, Japanese, and even Chinese prices.[11] To derive American figures from the customs returns, an increase of from 50 to 70 per cent must be added, according to the particular duty that each particular class of goods has to pay. An importation of silks rated at $30,000,000 may easily represent goods for which the consumer pays —at wholesale prices—from $45,000,000 to $50,000,000

It becomes impossible, then, to state with accuracy what our estimated 85 per cent of total home consumption supplied by domestic manufacturers really reduces to. The opinion seems general, however, among men

[11] Wyckoff, *Silk Manuf.*, p. 91.

acquainted with the conditions of demand and supply in the silk markets, that American silks satisfy between 70 and 75 per cent of the total demand.[12] Mr. Franklin Allen, former president of the American Silk Association, who compiled the report in the Census for 1900, computes that probably 75 per cent of the total amount paid by American purchasers for silks is spent for domestic products. The proportion in 1905 is considerably larger.[13] This computation allows for differences in prices between foreign and homemade goods.

Using the official statement as a starting point then, let us see where our home producers stand as regards the various kinds of silk goods now in use. In getting at the real selling value of the imported silks, it is probably safe to add to the figures for importation 70 per cent for customs duties, freight, insurance, and profit.[14] We shall make this allowance in the succeeding statements.

Between particular classes of goods results vary somewhat. Sewing thread and machine twist have always lent themselves readily to American methods of manufacture, and practically all the silk thread used in this country is made at home. Plain ribbons and narrow goods have more recently come into the same class, and of our ribbons 85 per cent is made here, allowing for duties, freight, profits, and so on. Of broad goods we supply only some 67 per cent of the demand, of velvets and plushes, 50 per cent. On other goods, such as trimmings, braids, knit pieces, curtains, and laces, varying proportions prevail. These goods all follow the general rule that the more individual and fancy articles are made in smaller and smaller proportions in this country. The

[12] *Thirty-second Ann. Rept. Silk Assn.*, p. 21. (for 1904).

[13] U. S. Census *Bull.* No. 74, p. 174.

[14] U. S. Census 1900, Vol. IX, p. 209.

predominance of the American manufacturer shows itself in goods that require a minimum amount of hand labor and of personal attention for their production, and of which large amounts can be turned out of the same pattern and quality. The woman who feels that she must wear "something different" sets in motion the looms of France and Germany.

Such is the extraordinary growth and present importance of an industry which it is safe to say is due almost entirely to the accidental cause of the need of a greater revenue with which to carry on our Civil War. The duty imposed at that time remained unchanged in the years succeeding the war. Under the stimulus of a vigorous protective policy the enormous and varied silk manufactures of today have come into existence. We have here, then, an example, and a striking one, of an industry practically created by protection; for the small output of sewing silk that existed before the Civil War can hardly be called a silk industry. We have seen how improbable would have been the erection of any considerable manufacture of silk products but for a stimulus and support of just such a kind as that afforded by our Civil War duty. That duty, though laid with other purposes in mind, has had results as significant as they are astounding. It presents the questions of how far the American industry has progressed toward a position of independence; how far it owes its future, as it does its wonderful past, to the protective wall that has hitherto sheltered it from foreign competition; and what probability there is of seeing some day a varied, independent, and progressive silk industry in America.

The problem before us is not such as can be solved offhand. Even to understand it requires a thorough examination of the conditions under which silk goods are

produced in this country, the obstacles that in the past have stood in the way of successful manufacture here, and those that still remain to be overcome. The nature of the task brings us therefore in logical sequence to a consideration of the raw material of which silk fabrics are made.

# PART II.

## THE RAW SILK.

### 3. NATURE OF THE SILK FIBRE: THE EARLY SUPPLIES FROM THE ORIENT.

The raw material from which the most strong, most durable, and most beautiful fabric in the world is made differs in its origin and natural characteristics from the basic material of any other texture known to man. The essential feature which differentiates raw silk from all other fibres is that the strands from the silkworm cocoon are taken off in a continuous thread, while those of the cotton plant or sheep's wool come in short lengths which must be twisted and spun together before they can be woven in the loom.

The cocoon of the silkworm is, for commercial purposes, divided into two parts. The outer part, of a yellowish color, consists of fairly strong fibres, which cannot be reeled off in a continuous strand. The outer hull is therefore peeled from the cocoon and set aside, to be treated in the same manner as the boll of the cotton plant; that is, it is spun into a continuous thread before it can be used on the loom. The textiles so made are known as spun silks, but they possess neither the durability nor the rustle and beauty of the reeled silk products.

The inner section of the cocoon, of a yellowish brown color, differs from the outer hull in that the fibre can be taken off in an unbroken thread. The cocoon is dropped into a basin of warm water along with from two to

seven others, and the loose threads are joined to make two strings, which are then twisted together into a single thread. This process is known as *reeling.* The single cable is wound on a spool which turns by power. The reeled silk is made into hanks or skeins of a certain length (usually 333⅓ yards, sometimes 500 yards), and in that condition it is marketed.

The machine which reels the threads from the cocoon is called a filature or reel. The word filature more properly applies to an establishment where reeling is carried on. Originally it required a single operator to attend to the product wound on each spool. Improvements have taken place in this class of machinery, and now a single operator can attend to as many as twenty-four spools at once.[1] In the history of improvements in reeling a strange paradox appears. The finest reels in the world, whether in use in Italy,[2] in France, in China, or Japan, are of American make.[3] Yet there is no commercial filature at present in this country.[4] The paradox is explained by the fact that we can not reel the silk from cocoons in this country because it is impossible to get the cocoons. The raw material has to be put into compact form for shipment. Moreover, labor is too expensive here to use it for reeling. Yet the necessity of our manufacturers for well-reeled silk has induced them to put time and money into the improvement of reeling machinery, and to make every effort to get the machines into use in other countries.[5]

In using the raw silk sent to this country, our manu-

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[1] See description of reels in *Special Cons. Rept.,* Vol. 15, pp. 140ff.

[2] *Cons. Trade Repts.,* Vol. 18.

[3] Allen, *Chronology,* p. 9. Also *Special Cons. Rept.,* Vol. 15, pp. 131-52.

[4] Cf. Wyckoff, *Silk Goods,* p. 10.

[5] *Ibid.,* p. 11.

facturers have met with innumerable difficulties. It happens that conditions of manufacture in the United States require that the raw silk be of uniform strength and thickness. The cost of labor is so great here that we cannot afford, as they can in countries where labor is cheap, to stop a machine in order to pick out flaws and irregularities in the threads. Now the filaments from cocoons vary greatly in quality, dependent upon the breed of the worms, the climate in which they are reared, the food and care they receive, and other circumstances affecting their health and growth. As a consequence, there occur great irregularities in the size, strength, luster, and cleanness of the filaments. Many of these diversities may be avoided if the cocoons are carefully sorted before reeling, so that all of each grade of fibre may be brought together. Moreover, even after the outer hull has been stripped off, the filament of the inner hull is of uneven strength and thickness, for the layers nearest the insect are of thicker and stronger fibre than those of the part farther away. All these variations have to be taken into consideration in reeling, the more skillful reeler being the one who can put upon the spool a thread of even thickness and strength. To do this may require that three, four, five, or more filaments, from different cocoons, be united to make a single thread. Even after this is done, the different skeins must be carefully assorted and sometimes re-reeled to make a perfect fibre.

The contrast between the raw silk used here and that delivered to European weavers for making the same class of goods is very striking. What is regarded as "poor silk" by our manufacturers, is accounted very fair material for delivery to the weaver abroad. The operator there can pick out "slugs" and irregularities, he can

stop to tie knots, he can go through all those processes, costly in labor, by which defects in the raw material are eliminated before the perfect fabric is completed. Though provided with imperfect fibre, he is supposed to turn out cloth free from defects.

The raw silk, so received, is not by any means ready for the loom. About a dozen distinct processes must be gone through first, which are known collectively as "throwing."[6] The silk must be wound, cleaned, "picked", doubled, twisted, rewound, and reeled again to turn the fine and delicate raw into more substantial yarn. The silk when thus treated is named, according to the part of the fabric it is intended to form, *singles, tram,* or *organzine. Singles* is made by giving the single thread a twist to make it stronger and firmer. *Tram,* forming the woof, or filling, consists of two or three threads just sufficiently twisted to make them hold together—on the average, about one turn to the inch, but varying according to the kind of article proposed to be made. *Organzine,* forming the warp threads, is made of two or more singles, according to strength and thickness desired, twisted together in a direction contrary to that of the singles of which it is composed. Silk that has reached the organzine stage is not accounted raw silk by our customs officials.

Asia has been the chief source of our supplies of raw silk ever since the earliest successful manufacture. The first importation of this material into the United States was in 1828. For many years, however, the Asiatic supply was unsatisfactory. It came by way of Europe, before the overland route was opened. At that time, we got only the stuff that Europe rejected.[7] Our small

[6] Anglo-Saxon "Thrawan", to twist or turn.

[7] Wyckoff, *Silk Goods,* p. 25.

manufactures of sewing silk were then made on hand machines, on which weaker fibres could be used, and were of rather inferior quality.[8] The stronger, cleaner. more carefully reeled material made in France and Italy was too costly to be worked with profit, as power looms were not in use at that time. By 1835 large supplies were coming from China, through Europe; but the threads were carelessly reeled, filled with slugs and dirt, and lacking in every requirement as to uniformity in size and strength. The makers of sewing silks before long began to appreciate the necessity of having clean and uniform fibres as raw material for their products. The use of machinery to make sewing thread was being adopted,[9] and the cost of labor to pick out flaws and imperfections encroached more and more on the profits of the silkmen. The protests over the qualities of Chinese raw silk grew louder and louder, but to no avail.[10] By 1840 the situation had become so unbearable that an important effort was made to secure the better preparation of the Chinese silk for the market.[11] It had been wound by hand from stationary bomboo sticks up to that time, a most primitive and unhappy method. Improved reels, comprising a winding frame moved by a crank and one or two other improvements, were sent to China. Samuel W. Goodridge, of Hartford. Connecticut, sent ten of these reels, and A. A. Low, of New York, sent sixteen of them.[12] Instructions also were forwarded as to re-reeling the fibre and assorting the sizes. The machinery proved too much for Asiatic intelligence or gave too great a shock to Oriental prejudices, for the new reels

[8] Wyckoff, *Silk Goods*, p. 14.
[9] Wyckoff, *Silk Manuf.*, pp. 42, 43, 44.
[10] Allen, *Chronology*, pp. 8 and 9.
[11] Wyckoff, *Silk Manuf.*, p. 43.
[12] Allen, *Chronology*, p. 9.

were not used. A more determined attempt was made several years later. Late in 1853 Mr. John T. Walker, a prominent raw silk importer of New York City,[13] went to China to see what could be done to relieve the situation. Noting that reeled silks from Canton were superior to those coming from Shanghai, he sent a number of bales from the latter place to Canton to be reeled. As the Canton reels were built on the American idea, Mr. Walker sent both reels and reelers to Shanghai to introduce the new style of winding.[14] The first reeled silk reached New York in 1854. The lesson was not well learned, however, for the silk soon deteriorated and importation ceased.

The efforts to secure better silk before mentioned were made by those interested in sewing thread and the subsidiary braid industry. With the Civil War and the higher tariff begins the modern period. With the manufacturers of ribbons and other new products now interested, the problem became a much more serious one. Ribbons must have a uniform surface; clean, uniform raw silk was a vital necessity. Protests proving uneffective, finally in 1867 renewed attempts were made to induce the Chinese to make the kind of silk we were willing to buy, and this time a firm of American sewing silk and ribbon manufacturers started a branch establishment in China. Ezra R. Goodridge and Company sent out Mr. Frank Goodridge to set up a filature in China and to carry on there the business, which has continued to the present day.[15]

After all the pains taken to cure the faulty reeling in China, and when trouble from this source was thought

[13] Wyckoff, *Silk Manuf.*, p. 146. J. T. Walker, Son & Co., raw silk importers, 81 Pine St., New York.

[14] Allen, *Chronology*, p. 45.

[15] *Ibid.*, p. 9.

to be nearly over, our manufacturers found themselves face to face with another and as serious a difficulty. Observing that the American demand was for the coarser and heavier[16] threads, the Chinese began to adulterate the raw silk. Acetate of lead was added in large quantities, to increase the weight; the practice became a crying evil by 1870. Vigorous protests were entered, and the Silk Association finally memorialized the Chamber of Commerce at Shanghai to put a stop to the adulteration.[17] In 1874 the Taotai issued a proclamation to the Chinese producers of silk, with letters of instruction to the chief officials in the silk districts. The proclamation ends, "Let all engaged in the preparation of silk be careful to obey these instructions, select the good from the bad, and constantly study how to improve the quality of their products until they are perfect, and on no account allow the least adulteration or infraction of what is necessary to make it perfect."[18] In the following year there was considerable improvement. Mr. Seth Low, an importer of New York, writes, "The quality of the Shanghai 1874-5 silk has been good, and the re-reels seem to have been less weighted than last year. They have also, as a whole, been well reeled and clean......we notice a largely increased call for Shanghai raws. The Canton silks that have reached New York have also been of excellent quality, and unusually fine in thread."[19]

The improvement, however, was rather short-lived. In time the adulteration began again, and has continued to the present day, though stopped from time to time by

[16] Machine weaving requires a coarser and stronger thread than hand weaving, because the strain is greater.

[17] *Third Ann. Rept. Silk Assn.*, pp. 20-21.

[18] Taotai's Proclamation to the Producers of Silk, 20th 3rd Moon. in *Third Ann. Rept. Silk Assn.*, p. 20.

[19] *Ibid.*, p. 59.

vigorous protest from Europe and America. Chinese silk at best falls short of the highest standards. Less than one fourth of our raw material now comes from China, and our purchases from that country are declining, both relatively and absolutely.[20] Only a lively awakening of the Chinese to their own interests in the matter of purity and reeling can restore their dwindling significance as a raw silk producing country.

About the time of the last mentioned serious attempt to establish better filatures in China, the Japanese began to awaken to their possibilities as a silk producing country. Some of the new machines were copied and set up in the island kingdom, and favorable reports of the Japanese raw silk began to appear in articles published in this country. The Japanese seem to have been too eager, however, and tried to forge ahead too rapidly. The demand for silkworm eggs became so enormous that a "profit of nearly ten times that on the cocoon or raw silk was realized on the sale of eggs."[21] All hands turned from reeling to the propagation of worms; in many cases the stock was so increased that the proper care and nurture of the worms became impossible. From 1870 to 1874 there was constant complaint as to the quality of Japanese silk. The reeling too, neglected during the mania for egg-producing, grew careless and turned out material unfit for use in this country. The government now took a hand in the matter. In 1874 the Hon. Tetsnoske Tomita, Vice-Consul of Japan at New York, visited the silk districts of his country and collected eighty-two samples of raw silk.[22] These he presented to the

[20] *Rept. Com. and Nav.* 1909, p. 317.

[21] Letter of Tetsnoske Tomita, Vice-Consul of Japan, to the Silk Association, February 3, 1875: *Third Ann. Rept. Silk Assn.*, pp. 22-3.

[22] *Third Ann. Rept. Silk Assn.*, pp. 20ff.

Silk Association, with a detailed report, describing the state of affairs in Japan, and asking the coöperation of American manufacturers toward bettering conditions there. Suggestions were requested regarding improvement of quality, strength, smoothness, twisting and reeling, adaptation to this market, and other requirements.[23] The samples examined were declared to have the general fault of being too thin and too uneven for use in our mills. The American loom uses only the coarser threads, for the reason that they increase the yardage, as well as possess the strength necessary for rapid machine weaving.[24]

The Japanese government took immediate action on receipt of this report; and the year 1876 marks the beginning of the rise of Japanese raw silk. A number of new and improved reels were sent to that country, and the government not only saw to their introduction into the establishments in Japan, but even set up an enormous filature on its own account. The government establishment has continued to the present day, constantly growing in size and efficiency. It not only brings a large revenue to the state, but serves as a model for all the other establishments in the empire. In it all the latest devices and improvements are experimented with and tried out before being definitely adopted. In the beginning skilled operatives from Europe were imported,[25] along with the best of European and American machinery; since then native labor has gradually been educated. Every effort was made to turn out the kind of raw material best fitted for use in this country. "In 1875 there were already 300 places in Japan for the filature reel-

[23] Letter of Tetsnoske Tomita to the Silk Association, *Third Ann. Rept. Silk Assn.*, p. 22.

[24] Allen, *Silk Ind. of World*, p. 26.

[25] Wyckoff, *Silk Goods*, p. 11.

ing of silk."[26] In 1901 there were 3911 manufactories and 418,065 families in that country engaged in the reeling of raw silk from the cocoon.[27]

The success of these efforts on the part of Japan to meet the requirements of the silk manufacturers of the United States in the matter of raw material was instantaneous and almost marvelous. The cordial relations established between the members of the Silk Association and Japanese producers resulted in turning the attention of silk importers to the raw silk coming from the island empire. Communications, once established, were quickly extended. Strangely enough, the improvement in Japanese fibres was accompanied by one of the periodical slumps in quality and purity characteristic of the Chinese product. It is interesting to compare the imports of raw silk from the two countries during the next few years.

IMPORTS OF RAW SILK.

| | China | Japan |
|---|---|---|
| 1873 | $4,386,523 | $ 240,000 |
| 1874 | 2,022,352 | 45,583 |
| 1875 | 594,906 | 166,539 |
| 1876 | 79,874 | 3,787,417 |
| 1877 | 233,390 | 4,371,886 |

The figures show the large use of the Chinese silk during the early seventies, when the Chinese producers were still turning out good silk under the stimulus of the new reels and the presence of an American establishment with improved equipment. The table also betrays the relapse in the quality and decline in the quantity of silk turned out by the Japanese while they were engaged in the egg-raising mania. The increase in the Japanese exports from $166,000 in 1875 to $3,787,000 in 1876 is characteristic of the energy and enterprise of the Japa-

[26] *Third Ann. Rept. Silk Assn.*, p. 22.

[27] *Fifth Fin. and Ec. Ann. of Japan*, p. 148.

nese when once their minds are bent on accomplishing a desired result. They were aided, as it happened, not only by the deterioration in the quality of the Chinese article, but also by the increased manufacture of silk goods in this country, which, as is elsewhere noted, took a sudden swing upward about this time.[28] The hold thus gained on the American market was never lost by the Japanese, though of course there have been many ups and downs in the quantities of raw silk sent here since then.

Too much reliance must not be placed in mere figures of export from any country of such an article as raw silk. There are few things in this world more uncertain to predict than the size of the raw silk crop in any one year. The smallest changes in weather, temperature, moisture, or general climatic or meteorological conditions, have great influence on the activities of the silkworm.[29] Moreover, he is a prey to numerous maladies, so that even if he is not killed by a sudden change in the weather, he may fall ill from one of the many diseases which his flesh seems heir to, and the fibre of his cocoon reflects such disorders. For instance, from about 1864 to 1878 the silkworm of Italy was beseiged by a disease called "pebrine", and the crop became less by from 10 to 70 per cent than the average crops before the plague.[30]

The Chinese silk received during 1875, 1876, and 1877 is characteristically described by Mr. William Ryle, then

[28] United States manufactures, in millions of dollars:

| | |
|---|---|
| 1870 | 12.7 |
| 1874 | 16.3 |
| 1875 | 21.3 |
| 1876 | 21.2 |
| 1880 | 34.5 |

[29] Wyckoff, *Silk Goods.*, p. 12.

[30] *Ibid.*, p. 13.

Vice-President of the Silk Association.[31] "The Shanghai silks"—where Goodridge & Company's filature was located—"have been fully up to the average in quality, but some of the lower grades have been very dirty and most abominably adulterated, as much as 21 per cent of adulteration having been detected in one lot."

Of the new Japanese raw silk just beginning to be produced under the changed conditions we have just described, Mr. Ryle says,[32] "After so much complaint has been made in the past years, it is very gratifying to report that the small quantity received from Japan this season has been of good quality, *and some of it particularly well adapted to requirements of our trade.* In winding, the silk proved equal to any from Europe, and was so uniform as not to vary more than 4 deniers in two threads." Very different is Mr. Ryle's description of the Chinese product and of the many difficulties arising from its use. For instance, he states that the Chinese betrayed a queer sense of business honesty and gives several examples of contracts unfulfilled and of adulterations. "The opportunity to cheat the foreigner was too much for Mongolian virtue to resist," he says of one case where pure silk was paid for and poor silk delivered. He concludes: "One would suppose that the loss of business arising from such deceitful practice would induce more faithful fulfillment of contracts; but experience proves that all considerations are inoperative to make the Chinaman honest in his dealings with the foreigner."

Mr. Ryle's report has been quoted to show exactly what was the situation as regards Chinese and Japanese silk, and to indicate the nature of the problems with which our manufacturers have had to grapple in secur-

[31] *Fourth Ann. Rept. Silk Assn.*, p. 30.

[32] *Ibid.*, p. 31.

ing an adequate supply of raw material adapted to the changing character of the silk industry of this country.

One would think, from the extraordinary efforts made by Japan to improve the quality of her silk supply, that the Chinese would pull themselves together to meet the competition of their Japanese rivals. This expectation would be supported by an inspection of the rapid rise in the figures showing the silk coming from China to this country.

IMPORTS OF RAW SILKS.[33]

| | China | Japan | Italy |
|---|---|---|---|
| 1877 | $ 233,390 | $4,371,886 | $19,979 |
| 1878 | 2,957,617 | 831,353 | —— |
| 1879 | 4,374,965 | 2,191,287 | —— |
| 1880 | 6,794,065 | 3,546,132 | —— |
| 1881 | 6,015,359 | 3,270,068 | 14,000 |
| 1882 | 4,846,865 | 4,588,139 | —— |
| 1883 | 4,370,684 | 5,589,152 | 74,804 |
| 1884 | 3,013,401 | 5,064,512 | 2,384,000 |
| 1885 | 3,199,811 | 5,272,113 | 2,408,000 |

The figures are not explainable in that way however. The Chinese way of meeting competition was, not to make better silk, but to lower the price. The complaints about the quality of the raw material from China continue unabated. The Secretary of the Silk Association, writing in 1879, says, "The importations from China have increased during the year, but the silk has not improved in quality, being adulterated at least as much as hitherto."[34] In 1880, the year of maximum importation for this period, he writes, "There has been no improvement in Chinese silk: the complaints of adulteration and other defects are more pronounced than ever."[35] In 1881 there is the same story, in almost ex-

[33] *Repts. Com. and Nav.* for corresponding years.

[34] *Seventh Ann. Rept. Silk Assn.*, p. 10.

[35] *Eighth Ann. Rept. Silk Assn.*, p. 3.

actly the same words: "There is no improvement to be noted in China silks; the re-reels are adulterated as much as ever, that is to say, as much as they can be."[36]

Why then this continued importation of Chinese silk? In the first place, silk from China is cheaper than that from Japan. For purposes of comparison there follow a few samples of prices, including European silk as well.

LONDON PRICES PER POUND OF RAW SILK.[37]

| | Chinese | Japanese | Italian |
|---|---|---|---|
| 1870 | 30/6 | 32/6 | 45/6 |
| 1873 | 28/6 | 30/6 | 47/ |
| 1877 | 29/6 | 34/6 | 47/ |

A further illustration of this phase of the situation is given by a comparison of quantity and value of the imports from Japan and from China in 1884. The Report for that year reads, "If estimated by *values,* only one fourth of last year's imports of raw silk came from China, but being of lower price than Japan or European, the *quantity* of Chinese silk exceeded one third of the whole."

Besides the consideration of price, there have been other reasons for the continued use of Chinese silk. There is evidence that the Japanese did not in every year maintain the high standard of quality that marked their first efforts to meet the American demand. The consumption of their reeled threads was so enormous that in their efforts to increase production they became overhasty and careless. In 1879, when the imports exceeded $2,000,000, the raw silk report reads, "There has been a large increase in the receipt of raw silk from Japan. The quality has not, however, been quite satisfactory in all instances, owing to a want of care in preparing this silk for the

[36] *Ninth Ann. Rept. Silk Assn.,* p. 10.

[37] By H. Zweifel and Company, in *Eighth Ann. Rept. Silk Assn.,* Appendix.

market...... The silk from the best filatures is not open to this criticism."[38]

Besides the deterioration and other difficulties encountered in the use of Japanese silk, there is still another cause for the continued importation of Chinese silk during this period, despite its adulteration and poor quality The manufactures of silken fabrics in this country were making enormous strides during the period under review. This is shown by the total imports of raw silk.[39]

| | |
|---|---|
| 1873 | $6,460,000 |
| 1874 | 3,854,008 |
| 1875 | 4,504,306 |
| 1876 | 6,778,000 |
| 1877 | 6,792,937 |
| 1878 | 5,103,937 |
| 1879 | 8,371,025 |
| 1880 | 13,837,809 |

Japan was unable to supply this enormous demand, and in consequence there was nothing to do but to fall back on the product of China. Toward the end of this period we find the raw silks of France and Italy also coming into favor.

Something may be said in this place about the London raw silk market. During the first half of the nineteenth century, and for some time afterward, the great raw silk market, especially the market for silk coming from the Far East, had been London. The natural market for silks coming by vessel around the Cape of Good Hope was London, and the considerable silk industry of England was built on the fact that their factories had first choice of Oriental silk.

The opening of the Suez canal, however, brought a change in this state of affairs. London is not, by geo-

[38] *Seventh Ann. Rept. Silk Assn.*, p. 10.

[39] *Repts. Com. and Nav.* for corresponding years.

graphical position, the center of the silk industry of Europe. Very little of the large quantity of silk produced in France and Italy ever went to London. Its natural market was Marseilles. To Marseilles now went the ships coming from the East by way of the Suez canal. The importance of the London market slowly declined, though it still had splendid facilities for the handling and reassorting of raw silk. During the seventies, the time of which we have just been speaking, imports from London were still considerable, and, though declining in amount, average nearly $1,000,000 a year for the decade.

IMPORTS FROM LONDON, RAW SILK.[40]

| | |
|---|---|
| 1873 | $1,198,000 |
| 1874 | 995,000 |
| 1875 | 949,900 |
| 1876 | 576,000 |
| 1877 | 1,113,000 |
| 1878 | 526,000 |
| 1879 | 871,339 |
| 1881 | 200,000 |
| 1882 | 364,000 |
| 1883 | 277,000 |
| 1884 | 43,000 |
| 1885 | 45,000 |

By 1884, however, the attractiveness of silk directly obtainable from Japan and China, and the increased imports from France and Italy, left no economic reason for the continued importations from London on a large scale. The figures dropped to some few thousands, and have remained inconsiderable ever since.

It is hard to give a compact statement of the comparative advantages, for the American manufacturer, of raw silk from the Orient and raw silk from Europe. We have already laid stress on the importance in this country of having raw material that is strong and uniform. Now

[40] *Repts. Com. and Nav.* for corresponding years.

it is perfectly true that from France and Italy come the most perfect specimens of raw silk made in the world. Great attention is paid there to the breeding and propagation of the worms, artificial climate is often produced for their benefit, and no efforts are spared to insure a strong and beautiful fibre. Moreover, the reeling is done in the most perfect manner, by skilled operatives, usually on American machines. The natural conclusion would be that since our manufacturers are forced by economic necessity to use only the best raw material, they must use the product of Europe.

The conclusion would be accurate were it not for other considerations. In the first place, European raw silk is much more expensive than that from the Far East. The labor which produces it is paid much higher. Moreover, Japan and China are now turning out raw silk that answers almost all purposes as to strength and uniformity. In the years before the seventies, when Oriental silk was so poorly prepared and reeled, nearly the whole of the American manufacture was carried on by means of hand looms. These machines do not need so strong a fibre to prevent breaking, as the strain is not so great, and they can easily be stopped to pick out flaws and straighten tangles and loose ends. Had power machinery come into wide use before the seventies it is undoubtedly true that the kind of raw material we were getting then from the Orient would have been unsuitable, and we should have had to use European fibres.

It is significant, however, that improvement in Oriental threads preceded and accompanied the application of power to weaving machinery in this country. The filaments from the Far East soon reached such a degree of perfection as to answer all the demands of American conditions of manufacture.

Yet there is, and always has been, an economic place for the raw silks of France and Italy in America. Satisfactory as the Oriental products have become, the best filaments from Europe are slightly smoother, slightly stronger, slightly more uniform, than the East can produce. The very finest silk manufactures of this country are made out of this raw material. Especially on the highest grades of plain dress goods, handkerchiefs, and laces, where durability, uniformity of surface, and luster are imperative, and where cost is a consideration of minor importance, the raw silk of France or Italy is indispensable.

### 4. RECENT RAW SILK PROBLEMS. SERICULTURE IN THE UNITED STATES.

The years from 1880 to 1884 mark the beginning of several changes in the factors of our consumption of raw silk. In the first place, the difficulties experienced with both sources of supply from the Orient naturally turned the eyes of our manufacturers to the European article. About 1881 our consumption of silk from France and Italy began to assume large proportions.

CONSUMPTION OF EUROPEAN RAW SILK.[1]

| | France | Italy |
|---|---|---|
| 1880 | $825,000 | ——— |
| 1881 | 1,343,817 | $14,000 |
| 1882 | 2,831,759 | ——— |
| 1883 | 3,607,958 | 74,804 |
| 1884 | 1,734,518 | 2,384,000 |
| 1885 | 1,382,800 | 2,408,000 |
| 1886 | 895,000 | 4,148,000 |
| 1887 | 1,340,000 | 4,622,000 |

The sudden increase in the figures from Italy with a corresponding decrease in those from France is only ap-

[1] *Repts. Com. and Nav.* for corresponding years.

parent. The Italian threads had been shipped from Marseilles up to 1883, thereafter they came from Italy direct —mostly from Naples.

There are several reasons why most of our European supply comes from Italy. Italy holds first place among the European raw silk producing countries. Its threads are cheaper, and if reeled well, the product from Italy is as good as that of France, if not better. The climate of Italy is more conducive to the health and strength of the silkworm than that of France, hence the filaments from the cocoons tend to be stronger. The finest raw silk in the world comes from Piedmont. The cost of labor is lower in Italy, and the raw silk can be sold cheaper. The only trouble is to get the reeling done as well. In Italy, as in the Orient, American reeling machines have been established, resulting in an immediate improvement in the uniformity and cleanness of the threads.[2] About 1882 American reels were introduced even in France, and resulted in a marked increase of output per unit of labor. Mr. Briton Richardson stated in 1889 that by the use of the new reels "French operators can reel a pound of silk per day, whereas one-half pound was the average output in 1881."[3] For some purposes French reeled silk is still used in this country, and a small amount continues to be imported every year.

The poor quality of the Asiatic silks is not the only cause of the increased use of European thread during the early eighties. Two other factors in the conditions of American manufacture have a direct bearing on the situation. One is the new production of broad goods, especially of plain dress goods. The other is the change from hand to power loom. Plain dress goods are harder

[2] *Special Cons. Rept.*, Vol. 15, pp. 131-42.

[3] *Tariff Rev. Hearings*, 1899-90, p. 604.

to make than varied and figured goods, for the reason that the plain fabrics show every defect; and trifling variations in the mere thickness of a thread, which would be imperceptible in textures that are overlaid with ornament, become striking blemishes in an article of smooth and uniform surface. For these purposes the European product, though much higher in price than the Oriental, possesses the requisite qualifications in a more marked degree.

Importations of Italian raw silk have so steadily increased since the early eighties that they now surpass in value those from China. The proportion of European silk imported to this country has, however, remained fairly uniform, at about one fourth of our total consumption. Since the troubles with Japanese silk in the seventies and early eighties the quantity imported from Japan has steadily increased, and a constantly larger proportion of our raw material comes from that country. Considerably over one half of our raw silk is now Japanese. About one fourth comes from Europe, while the Chinese reels, once almost our sole source of supply, now send less than a quarter of the quantity at present consumed in the United States.[4] This country, which produces no raw silk, is now the largest consumer of that commodity in the world.

In spite of the enormous increase in the consumption of silk in this country, the proportions sent to us by different countries have shown little change during the past twenty years.[5] There is small need of following closely the fluctuations in the quantities imported from the various countries since 1885-6, as the slight changes from year to year are only seasonable and such as are readily

[4] Cf. *Thirty-eighth Ann. Rept. Silk Assn.*, (1910), p. 24.

[5] *Thirteenth and Fourteenth Ann. Rept. Silk Assn.,* Secretary's Reports on General Trade Conditions.

traced to the good or bad crops in the corresponding countries. The general tendencies have been toward a relative increase in the proportions coming from Italy and from Japan, and a decrease in the proportions sent us by China. This is what we should expect when we consider the vital importance of perfect threads to the successful manufacture of silk under American conditions. The Chinese product has improved considerably since the eigthies; if it had not, none at all would now be imported; but Chinese silk at best has always fallen short of the highest standards.

The policy of Japan has shown keen farsightedness and has resulted in wonderful progress, particularly in the last ten or eleven years. There had always been some complaint that raw silk from the East was irregular in the size and weight of the bales received, and that the gum was not always properly boiled off.[6] In Europe this matter is taken care of by a so-called "conditioning house," where the raw yarn is boiled off, weighed, and measured in accordance with certain standards. A certificate is then issued guaranteeing the perfect condition of the silk.[7] As our imports from Japan increased, complaints arose over the imperfect condition and short weight of the skeins received. The matter came before the Native Silk Guild of Japan and through that body was brought to the notice of the Emperor.

In 1897, therefore, the Imperial Government set up a silk conditioning house in Yokohama, showing the entire sincerity of the Japanese in their efforts to put the sale of raw silks on a satisfactory commercial basis. Documents were issued certifying to the quality and quantity of each bale of raw silk passing through the establishment.[8] For

[6] *Thirty-second Ann. Rept. Silk Assn.*, pp. 28-9.
[7] *Thirty-third Ann. Rept. Silk Assn.*, pp. 51-2.
[8] *Thirty-fourth Ann. Rept. Silk Assn.*, p. 36.

various reasons chiefly connected with lack of experience in such matters, the project was not at first a complete success. Many bales certified as perfect were found to be short in weight or too heavily gummed, that is, not boiled off properly. Confidence in the documents issued by the conditioning house declined. The experiment was not given up; its lack of success served only to stimulate the Japanese to further efforts. A letter from the Silk Association in 1904 brought an immediate and highly satisfactory response from the Association of Foreign Raw and Waste Silk Merchants of Yokohama.[9] The Native Silk Guild passed resolutions to the effect that every bale exported to this country must pass through the Imperial Conditioning House, and that the aforesaid establishment should be enlarged and reconstructed to meet all requirements. The government immediately promised to back up every resolution of the Guild.[10]

Not only were all the innovations put through as promised, but in the year following still another step was taken, on the sole initiative of the enterprising Japanese. Under the auspices of His Imperial Highness, Prince Fushimi, the Japan Silk Association compiled a book showing the trade marks of all the raw silk exporters. This was sent to the American Association with a letter from Baron Matsudaira, President of the Japanese body, saying, "I hope you will show the publication to the people interested in silk weaving in your country, and should our raw silk be found defective in any way for the purpose intended, I hope you will be good enough to point out to us the *trade mark* of that particular bale, with full particulars and sample thereof. Our organization will always welcome your suggestions, and doing all in its power to warn our raw silk producers, will prevail upon

[9] *Thirty-fourth Ann. Rept. Silk Assn.*, pp. 40-41.
[10] *Ibid.*, p. 46.

them to introduce such improvements as you may desire."[11]

As against such enterprise as this, other raw silk countries are at a disadvantage. The last three years have witnessed a tremendous increase in the importations from Japan.[12] In 1907 nearly two thirds of our raw material came from that country, and the proportion promises to become even greater.

A word should be said in regard to sericulture in the United States. Experience in this and other countries ought to have proved long ago the insurmountable nature of the obstacles that stand in the way of any extensive raw silk industry in this country. Yet the subject comes up for more or less serious discussion every few years. There seems to be an irresistible attraction in the idea of having industry entirely independent of other countries —the idea of the self-sufficing state. The truth is, in a large portion of the United States healthy silkworms can be bred and reared by anybody who has the time, patience, and mulberry trees at his command. The sole difficulty is to dispose of the cocoons at a profit.

Since the disastrous ending of the *Morus Multicaulis* speculation in the early forties, the amount of raw silk raised in this country has at all times been a negligible element in the material used by manufacturers. It would be idle to give an exhaustive account of the many trifling experiments that have been attempted since that time.

[11] *Thirty-fifth Ann. Rept., Silk Assn.*, p. 28.

[12] Imports of raw silk from Japan, from *Repts. Com. and Nav.* for corresponding years.

| | |
|---|---|
| 1904 | $24,373,136 |
| 1905 | 27,141,000 |
| 1906 | 27,600,000 |
| 1907 | 38,461,000 |
| 1908 | 40,678,000 |
| 1909 | 44,689,000 |

An example will suffice. In California, about 1860, the cultivation of the mulberry was begun, and by 1865 250 pounds of cocoons were obtained. The industry was temporarily saved from disaster by an act of the California legislature, giving a bounty of $250 for planting 5000 mulberry trees and $300 per 100,000 cocoons. A speculation in silk raising followed. The operation of the Act proving unsatisfactory, the bounties were repealed. The product reached 1900 pounds by 1868. but, the sale of the cocoons proving unprofitable, the producers tried to divert their industry to the propagation of eggs for export to Europe. The speculation "raged with unabated fury for several years, inflicting severe losses."[13] The Commissioner of Agriculture reports that silk raising in California was extinct in 1878.

The Census of 1880 made inquiries as to the amount of raw silk raised here in that year, but soon discovered that the expense of making an investigation would exceed the value of the result. There seem to have been in that year only two instances of the use of native silk in manufacture, and those of no commercial importance. One was in Williamsburg, Kansas; the amount produced was less than five hundred pounds.[14] At Salt Lake City, Utah, a small amount of home grown silk was used, but the whole amount produced in the territory was less than a thousand pounds. The experiment soon proved a financial failure, "the raw silk costing more than that from the Orient."[15]

In the Report of the Tariff Commission of 1882 there was some discussion of stimulating the production of raw silk in this country. The Commission, however, received very little encouragement from testimony of the witness-

[13] *Rept. Com. of Agric.*, 1878, p. 495.

[14] U. S. Census 1880, *Silk Mfrs.*, p. 64.

[15] *Ibid.*, p. 65.

es examined. Mr. Frank Cheney[16] declared that to put a duty on raw silk to encourage its production here would be "a very losing business." It would be impossible, he asserted, for us to attempt sericulture in this country until our people were willing to accept the low scale of wages paid in the Orient, or at least in Europe. Reeling operatives in France receive 20 to 25 cents per day; in Italy from 15 to 20 cents. All the labor-saving machinery that it is possible for American ingenuity to devise in this industry is already in use in those countries.[17] A duty that would make silk raising possible would have to be prohibitory, and thus cut American manufacturers off from what would have to be for many years to come their chief sources of supply.

During the eighties the production of raw silk was again attemped in California, while the experiments in Kansas and Utah have been continued sporadically. When the tariff revision of 1889-90 was under consideration, the Department of Agriculture made an investigation of the sericulture industry, and advised the Tariff Committee of the House to hear testimony relative to encouraging raw silk production. The witnesses, however, persisted in giving adverse testimony, in spite of the efforts of the members of the committee to elicit evidence in favor of protection. One manufacturer admitted that raw silk could be raised in this country if given enough protection, but when asked what protection he considered enough, answered, "Oh, about a thousand per cent."[18]

The House Committee, under the circumstances, could not see their way clear to recommending a duty on raw silk; but Mr. Philip Walker of the Department of

[16] *Rept. Tariff Com.*, 1882, Vol. 2, p. 2167.
[17] *Special Cons. Rept.*. Vol. 15, pp. 131-2.
[18] *Tariff Rev. Hearings*, 1889-90, p. 600.

Agriculture made an extended report, advising a bounty of $1 a pound on all the raw silk manufactured.[19] This was put into the House bill[20] and passed the lower body.[21] The Finance Committee of the upper house recommended that the paragraph be omitted, and it thus failed to pass the Senate. It also failed in the Conference Committee of the two houses, and possibly was never expected to remain in the final bill at all.

In 1894 a raw silk grower of California appeared before the Committee on Ways and Means and asked that a duty of 15 per cent be put on the importation of his product.[22] The question came up again in 1897, and was discussed, but not very seriously. Nothing was done.

In 1898, however, were taken the first steps of any consequence that have been known for over half a century to encourage the production of raw silk in this country, since, in fact, the repeal of the duty of 15 per cent on imports in 1857. In 1898 the Department of State issued a circular letter to our consuls in various cities of France and Italy, asking for minute accounts of silk growing and raw silk reeling in their localities, with descriptions of the machinery used. The replies of the consuls will be found in the Special Consular Reports.[23] From these it appears that the best reeling machines in use in those countries are of American make, that the labor is highly organized in large filatures for the most part, and that the operatives, though possessing a considerable degree of skill, are paid next to nothing. The Department recognized the fact that silk cocoons are of little value in a country where there are no filatures for reeling off the

[19] *Tariff Rev. Hearings,* 1889-90, pp. 601ff.

[20] H. R. 9416.

[21] *Cong. Record,* Part 5, vol. 21, pp. 4246ff.

[22] *Tariff Hearings,* 1893, p. 1022.

[23] *Special Cons. Rept.,* Vol. 15, pp. 131-52.

fibres. The manufacturer wants reeled silk, not cocoons; and aside from the question of a cheap labor supply, there can be no filature in this country until there are enough cocoons to supply it with material on which to work.[24]

After the reports of the various consuls had been received, the whole matter was turned over to the Department of Agriculture. That body took immediate action, following a course that seemed best suited to answer the difficulties of the problem presented. Guaranteed eggs were procured from Italy, as well as a supply of mulberry cuttings. Two reels were purchased and two skilled reelers were brought over from France; these remained in Washington some months instructing several American girls in the art of reeling filaments from the cocoons. Manuals of instruction were then printed, giving minute directions for raising the worm and caring for the mulberry shoots. The eggs purchased from abroad were sent, on application, to all persons possessing mulberry plants, and to those who had not, cuttings or seeds of the mulberry were forwarded.[25] The idea of the bureau is to furnish a market for the cocoons. All cocoons raised are bought by the Department at current European prices. The cocoons are then reeled by the bureau's employees and the raw silk resulting therefrom is sold. The Secretary says: "It has been the aim of the Department to get mulberry trees planted in favorable situations, to educate as many people as possible in the care of the worms, and, by purchasing the cocoons, keep its correspondents interested until the time comes when the establishment of commercial filatures will be possible. The recent invention of silk reels which greatly reduce the cost of reeling, and the establishment

[24] Cf. Wyckoff, *Silk Goods*, p. 32.

[25] *Rept. Sec. of Agric.*, 1905, pp. 65-6.

of colonies of Italians and others skilled in silk culture at different places in the United States seem to point to the establishment of the industry before long."[26]

The Secretary's words evince more confidence than the actual state of affairs will support. There has been some increase in the raising of cocoons since 1902, but the trouble is that the "current European prices" are not sufficient to pay for the expense. A glance at the consular reports shows how great is the personal attention needed for each silkworm, and how small is the total quantity of silk derived from each cocoon. The raising of silkworms has recently been taken up in eleemosynary institutions, homes for the aged, and other places where there are people with a considerable amount of idle time on their hands,[27] but we are as far as ever from raising silk on a commercial scale.

To bring this subject to a close, let us sum up such conclusions as we can reach in regard to sericulture in the United States. It is not advisable to undertake it anywhere on a large scale in this country. The industry is not likely to be profitable, especially if labor has to be hired for the undertaking. The wages paid to raisers of silkworms are considerably lower than those paid to reeling operatives, since no technical training is required. In fact, the work is usually done by the women of families. There is no possibility of applying machinery to the raising of silkworms or of conducting it in such a way as to make the labor in this country more efficient than it is abroad, and unless that is done, the laborers could not be paid more than the impossibly low wages prevalent in Italy or the Orient. Even if

[26] *Rept. Sec. of Agric.*, p. 66.

[27] The industry was attempted by Mrs. P. Johnson, in charge of the Female Penitentiary at Sherburne, Mass., but has since been given up.

the cocoons could be raised, it seems almost as difficult to believe that a filature for reeling silk could ever be commercially profitable in this country. All the latest improvements in reeling silk are in use in other countries. In fact, American manufacturers immediately send abroad any improvements in such machinery, as it is to their advantage to lower the cost of reeling.

It may be admitted that the reeling of silk does offer opportunities for the continued application of labor-saving machinery, since great advances have been made in this field in the past ten or fifteen years. A filature, however, is impossible without cocoons. The raising of silkworms can never be of commercial importance here until the price of raw silk has soared to impossible heights, or until the price of labor has fallen to levels as low as the wages paid to the poorest toiler in Eastern lands. The outlook at the present stage shows silk culture in the hands of those whose activities can hardly be said to be governed by economic laws.

# PART III

## THE GEOGRAPHICAL DISTRIBUTION OF THE INDUSTRY.

### 5. EARLY CENTRALIZING FORCES.

The question of raw material and the problems connected with it having been considered, we now turn to the geographical distribution of the industry. The location of the silk manufacturing centers is a factor of vital importance to the success of the industry, for closely connected with it are the questions of labor supply, power, ground rent, taxes, and accessibility to raw silk and to markets. The ability of our manufacturers to compete with those of Europe depends largely on their advantages or disadvantages in these important factors.

The location of an industry is seldom a matter of mere chance. Just as in the world at large every country has a comparative advantage over every other country in the production of certain articles, so in a single state certain localities have advantages over others in the production of various commodities. In considering the localization of the silk industry, it will be our task to point out where the different branches of the silk manufacture have been and are now located, what the general trend of concentration has been, and what importance the factors just named have had in causing the industry to congregate in certain places.

There are now upwards of twenty-five different states in which silk manufacture is carried on in some form or other, but the amount produced in most of these is in-

considerable. The five states of New Jersey, Pennsylvania, New York, Connecticut, and Massachusetts are the main sites of the American industry.

Connecticut, which early stimulated the raising of raw silk by bounties, held the lead for many years. The advantage of being the first in the field made it easier to build a new plant in that state, where there was plenty of labor skilled in the manufacture of sewing thread and where there were facilities for obtaining raw material, than in a totally new locality. In 1832 the bounty on reeled silk was increased to 50 cents a pound.[1] In 1834 Mr. Ward Cheney started a factory at South Manchester, the nucleus around which the great manufacturing establishment of Cheney Brothers has since grown.

After 1842 the raising of domestic silk fell off rapidly, and by 1844 had almost ceased,[2] although Congress tried to encourage silk culture by a duty of 15 per cent on imports.[3] Deprived of the hoped-for domestic supply, and further disheartened by the gloomy business outlook, a large number of the new silk manufacturers went to the wall. The production of sewing silk declined for a number of years, though it was never abandoned, in spite of the fact that the raw material had to be imported at a 15 per cent duty. The increase in imports[4] of raw silk taken together with the decrease in production of sewings shows to what extent domestic silk culture fell off.

[1] Wyckoff, *Silk Manuf.*, p. 32.

[2] Allen, *Chronology*, p. 24.

[3] U. S. Census 1860, p. CI.

[4] Imports Raw Silk, U. S. Census 1880, *Silk Manuf.*, p. 47.

| | |
|---|---|
| 1843 | $53,350 |
| 1844 | 172,593 |
| 1846 | 216,647 |
| 1848 | 354,973 |
| 1850 | 401,385 |
| 1855 | 751,617 |
| 1860 | 1,340,676 |

The change in the source of supply of raw material made many changes in the location of the industry. The raw silk now imported came almost entirely by the way of New York. As that city received also nearly all the foreign manufactured goods sent to this country, it became at once the natural market for the sale of silk articles. Prospective manufacturers therefore turned their eyes toward the metropolis. Here was plenty of labor, here was the raw material, here was the market for the sale of the finished product. The chief drawbacks were that land was expensive and taxes high. From these conditions was evolved a new distribution of the industry.

The manufacture of trimmings, as we shall see later,[5] is simple, and does not take up much space. Braids and trimmings were then made from sewing silk on simple hand machines. Two or three rooms would suffice to carry on a considerable amount of production. It is not strange, therefore, that New York now comes to the fore in the making of fringes, tassels, braids, and trimmings. The same conditions obtain in Boston and Philadelphia, and many establishments were started in these three cities.[6] By 1860 Philadelphia was slightly in the lead; this preëminence she kept for a few years, owing possibly to lower cost of living and cheaper rents. New York was then a close second, and Boston third. New York soon took first place, and has ever since been the chief seat of the manufacture of fringes and trimmings. The amounts produced in other states were very small.[7]

The price of land and the high taxes militated strongly against the establishment of the sewing silk manufacture in New York City. The making of sewing silk requires

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[5] *Infra.*, Part V.

[6] Allen, *Chronology*, pp. 23-5.

[7] U. S. Census 1860, p. CIII. Also Wyckoff, *Silk Manuf.*, p. 42.

a plant and room for heavy machinery run by power. The problem then was to find a place where land was cheaper and taxes lower, yet near enough to the city to be sure of a large labor supply and the advantages of proximity to raw material and the selling market. Paterson, New Jersey, a city of considerable size, only seventeen miles away, seemed to be best suited to the requirements of the situation. The first mill was erected there in 1840, by Mr. G. W. Murray of Northampton, Massachusetts.[8] The growth in New Jersey was slow for a time; in 1860 there were only six establishments in that state, four of which were in Paterson. But in the amount of silk goods produced, New Jersey stood second among the states just before the Civil War.[9]

During the war and in the years immediately following a large number of new concerns were started, but there is little information available as to the trend of localization. From the addresses of the new firms, one gets no idea of concentration in any particular spot. The newcomers seemed to have no particular choice. Massachusetts, New Jersey, New York, Pennsylvania, Connecticut, and even Maryland were almost equally favored at first. By the end of the war, however, and for the rest of the decade, two distinct movements are noticeable. One is seen in the success and growth of the Massachusetts concerns, due, as far as the evidence goes, to the enterprise and ingenuity of the manufacturers of that state. A number of clever ideas in preparing spool thread for the market made their product attractive to prospective buyers. At the same time some of the firms made and introduced to consumers measuring and strength-testing devices.[10] Improvements in dyeing, making the

[8] Wyckoff, *Silk Manuf.*, p. 43. Cf. Allen, *Chronology*, p. 18.
[9] U. S. Census 1860, p. C.
[10] Allen, *Chronology*, p. 32.

thread stronger and purer, were introduced and widely advertised, which added greatly to the reputation of Massachusetts silk thread.[11]

The Massachusetts industry was located mostly in the hilly western part of the state. The region abounds in small streams, furnishing an abundance of easily available water power. The presence of water power has proved an important factor in concentrating cotton and woolen, as well as silk manufacture, in the same district.[12]

Another movement in the localization of the industry is the tendency toward concentration in Paterson. This is particularly noticeable, during the years following the war, in the new ribbon manufacture. At first the new firms, as we have seen, seemed not to favor any particular spot. Toward the end of the sixties there seems to be an ever increasing number moving from Massachusetts, Connecticut, and New York to Paterson. The newcomers are mostly English or German.[13] Such are Strange and Brother, who began the manufacture of ribbons in New York City in 1861-3, and who moved to Paterson in 1868. Louis Franke also began in New York, but joined the migration to Paterson. Wolfsohn, Meyenberg and Company started in 1866 in New York, but they too eventually moved to Paterson. Aub and Hackenburg set up a plant in Philadelphia in 1863. L. R. Stelle and Sons began at Utica, New York, but moved to Paterson in 1866.[14] Messrs. A. Soleliac and Sons began the manufacture of

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[11] Allen, *Chronology,* p. 33.

[12] Wyckoff, *Silk Manuf.,* pp. 113-15.

[13] Allen, *Silk Ind. of World,* p. 15. Also Wyckoff, *Silk Goods,* pp. 45-6.

[14] Allen, *Silk Ind. of World,* p. 14. The Ryles, Tilts, and Mr. G. Lambert were all English born.

ribbons at New York; three years later the plant was transferred to Paterson.

The attractions of the region around Paterson must have been considerable, if it was enough to induce so many men already established in other localities to transfer their whole plants to that place. Yet it is perfectly natural that a new industry should concentrate in a spot offering so many advantages. The older manufacture of sewing silks and twist had a reputation behind it. Connecticut, and of late Massachusetts, had the organization, the skilled labor, the good repute, that goes toward the successful making and marketing of sewing silks, for the loss of which removal to Paterson could hardly compensate them. The ribbon industry, then newly introduced, had all its reputation before it. Low taxes and cheap land, and above all nearness to the source of raw material and to the most natural market for the finished product, offered advantages that could not well be ignored. Throughout the later sixties and the early seventies this movement continued, until Paterson became recognized as the leading, almost the only, ribbon manufacturing city in the United States. Such new manufactures of sewing silks and twist as were started during and after the war of the rebellion were impelled to set up in New Jersey from much the same motives as appealed to the ribbon concerns. The census of 1870 is by no means accurate; but it may be worth noting that New Jersey is given the leading place in the census of that year in the value of silk goods produced, the figures being $2,678,161. Connecticut for the first time appears in second place, with $2,048,834 worth of product. New York (from its manufacture of braids and trimmings) occupies third place, at $1,211,385; while Massachusetts and Pennsylvania are nearly tied for fourth place, with

a production somewhat less than $1,000,000. Massachusetts is slightly ahead of Pennsylvania.[15]

During the next decade the situation in the silk industry, so far as its localization is concerned, remained practically the same. What difference there was, may be attributed to the influence of the two new branches that were introduced during this time, broad goods and laces. For both of these, proximity to the silk center, New York City, offered advantages scarcely equaled by any other locality. As in the case of ribbon producers, most of the new broad goods manufacturers set up their establishments at Paterson or the immediate vicinity.[16] Many of the ribbon concerns already there added the production of broad goods to the output of their mills.

The equipment and method of manufacture of spun silks partakes more strongly of the nature of cotton manufactures than anything connected with reeled silk products. The manufacture of spun silk had been going on in Connecticut since 1852. But the conditions of manufacture did not for a long time suggest the making of broad and narrow reeled silk products. Now, however, we find the Connecticut manufacturers showing a strong tendency to branch out, and adding narrow and even broad goods looms to the equipment of their mills. It was their hope that the reputation they already enjoyed, together with their long experience in the making of silk thread and spun silks, would offset the benefits conferred by a more convenient location. The situation furnishes an illustration of an industry growing up and prospering around the place where its earlier branches were first established, in spite of the advantages

[15] U. S. Census of 1870.

| | |
|---|---|
| Massachusetts ............... | $937,000. |
| Pennsylvania ................ | 919,024. |

[16] Allen, *Chronology*, pp. 38-41.

of some other naturally superior location. The silk mills of Massachusetts branched out also, but the silkmen of that state were more cautious, and confined their production of new articles almost entirely to ribbons.

The case of lace manufacture presented different problems from that of broad goods. Laces are like fringes and trimmings in that no large plant, no great floor space, is necessary for their production. Made from sewing thread, sometimes from spun silk, all the elaborate plant necessary to convert raw silk into weavable material, to design pattern cards, and so on, is not necessary. Again, silk laces are extremely liable to changes of fashion and taste, so that the output must be closely guarded both as to amount and kind. To answer all these conditions and requirements the city of New York, where the laces are sold and the demands of the consumers soonest known, offers advantages as to location unsurpassed by any other place. It is not surprising to find that city the chief seat of the manufacture of silk lace.[17]

We find therefore some changes in the geographical distribution of the industry in 1880. New Jersey is still first, but New York is now in second place, and Connecticut third. The proportions of production have also changed, both as to amount and kind, as is seen from the following table.

PRODUCTION 1880.[18]

| | Sewings *Pounds.* | Broad Goods *Yards.* | Ribbons and Laces *Yards.* | Trimmings *Pounds.* | Total *Value.* |
|---|---|---|---|---|---|
| New Jersey..... | 25,580 | 6,975,655 | 8,794,100 | 50,405 | $12,851,045 |
| New York...... | 88,765 | 1,427,439 | 10,302,696 | 403,330 | 9,368,025 |
| Connecticut .... | 394,981 | 2,253,070 | 8,541,235 | 695 | 5,438,075 |
| Massachusetts . | 273,816 | 99,120 | 573,320 | 39,787 | 3,491,093 |
| Pennsylvania .. | 23,110 | 101,000 | 1,915,000 | 192,824 | 2,853,165 |

[17] Wyckoff, *Silk Manuf.*, p. 58.

[18] U. S. Census 1880, in Wyckoff's *Silk Manuf.*, pp. 57-8.

It will be noted that for some unknown reason the census compilers have grouped together the items "ribbons and laces." The production of New Jersey is mostly ribbons, that of New York mostly, but not entirely, laces. The advantages as to location enjoyed by Paterson are shared almost equally by many other towns in the vicinity of New York City. Long Island concerns are frequently mentioned,[19] and many smaller towns farther west appear in the silk producing list.[20] In these outlying towns all kinds of products are manufactured—ribbons, thread, broad goods, and so forth—and these appear in the statistics for New York State. In the city itself nearly all the concerns are making laces, trimmings, braids, or novelties of one kind and another.[21]

In Massachusetts there appear only two large items, sewing thread and the compound product "ribbons and laces." Laces and trimmings were made in Boston for much the same reason that they were made in New York City: the small floor space necessary for their production lessens the expense for rents and taxes, while nearness to a fashion center offers obvious advantages. The ribbons were made mostly in the western part of the state, where the sewing thread manufacture first began—the dominant attraction here being a plentiful supply of water power.

It is worthy of note that the manufacture of fringes and trimmings is the most widely scattered branch of the silk industry. Almost every large city, except those in the South, is or has been the seat of a more or less considerable trimmings industry. In 1880 Illinois returned

[19] There were 18 firms in Brooklyn in 1883. Cf. Wyckoff, *Silk Manuf.*, p. 133.

[20] *Ibid.*, p. 134.

[21] *Tenth Ann. Rept. Silk Assn.*, pp. 123-32.

a production of 12,220 pounds of trimmings, and nothing else. Every bit of this was made in the city of Chicago.[22] Ohio had 2187 pounds of trimmings in that year, all made in Cincinnati.[23] Maryland showed 1784 pounds of trimmings, all made in Baltimore. The same is true of Missouri and Rhode Island, the cities of St. Louis and Providence showing each a small output of trimmings and small goods. In none of these states was any other silk fabric produced. The production of these states is listed as "trimmings and small goods." Manufactures so listed are for the most part of the simplest and narrowest kind. The fashioning of silk purses and collars, the covering of buttons, the making of tassels and fringes, might all come under this classification. The production of such articles on a small scale would naturally spring up in any large city to satisfy local dressmakers' and milliners' demands.

California appears in the Census of 1880 as the producer of 9500 pounds of sewing silk and 4650 pounds of trimmings. The latter item represents the trimmings and small goods production of the city of San Francisco. The sewing silk is the result of a peculiar and interesting experiment on the part of some business men of California. In 1875 the Union Pacific Silk Manufacturing Company was formed, and inaugurated the employment of Chinese labor in silk manufacturing.[25] The plan was to turn out all kinds of fabrics; but, as might be expected, only a very small proportion of the laborers ever learned to take care of their looms intelligently. Better success attended the making of sewing silk and tram. The machinery used in turning out these articles

[22] Wyckoff, *Silk Manuf.*, pp. 110-11.

[23] *Ibid.*, p. 135.

[24] *Ibid.*, p. 107.

[25] *Third Ann. Rept. Silk Assn.*, p. 24.

required much less intelligent attention than the more complex weaving looms. A later report stated that "the Chinese boys who are employed at the winding and filling machines give perfect satisfaction."[26] The experiment was watched with interest, but nothing more was ever heard from it.

6. PENNSYLVANIA AND THE NEW MANUFACTURES.

The decade from 1880 to 1890 marks the beginning of a change in the geographical distribution of the silk industry of great and far-reaching importance. The latter part of this decade sees a remarkable advance in the improvement of throwing[1] machinery. As each invention made the mechanism more and more automatic in its action, there was constantly less need for strong, intelligent, skilled labor. Consequently women and children began displacing men at the throwing machines.[2] Toward the end of the decade and in the early nineties this tendency became more strongly marked. Manufacturers of thrown silks began to cast about them for a place containing a plentiful supply of the cheap unskilled labor they required. The coal regions of Pennsylvania seemed to offer advantages unexcelled by any other locality. The miners' wives and children were then practically unemployed, and could furnish an abundant supply of cheap labor.

The mining regions of Pennsylvania offered many other advantages before unthought of. In the first place, fuel was much cheaper there than anywhere else; taxes and rents were very low. To add to these attractions, the rural towns, anxious to see the silk manufacturing plants

[26] *Third Ann. Rept. Silk Assn.*, p. 25.

[1] "Throwing" is an early stage in the manufacture, preparing the raw silk for use in the loom. See p. 14 above.

[2] U. S. Census 1900, Vol. IX, p. 212.

established in their midst, offered every inducement to prospective manufacturers. In many cases, taxes were remitted, land was presented outright or granted rent free, and in some instances even public subscriptions were taken up and the amount raised was offered as a bonus.[3]

There was naturally an immediate rush to Pennsylvania on the part of thrown silk manufacturers. Many broad silk and ribbon establishments that had before done their own throwing in their own plants, now started branches or "annexes" in Pennsylvania. Later on, the whole plant might be moved to that state. In fact, from that time to the present day, it has been a serious problem with manufacturers whether an isolated or more central location offers the greatest advantages. On the one side are cheaper fuel, cheaper labor, lower taxes, less expense for factory space; on the other there is proximity to the market, to expert textile machinists, and to depots for all manner of supplies. There is also the advantage of having "trained employees, who can hardly be induced to move to country towns, where almost all the operatives must first be instructed in their several tasks."[4]

This much may be said, however: in any case where mechanical improvement has gone so far as to make the operations nearly if not quite automatic, and where tending the machine has become almost a perfunctory task, easily given to women and children, the industry migrates toward a district that will provide the kind of labor best suited to it. Manufacturers of thrown silks[5] in other localities have found it almost impossible to compete with the establishments in Pennsylvania.

[3] U. S. Census 1890, *Manuf. Ind.*, Pt. III, p. 219.

[4] *Ibid.*, pp. 219-21.

[5] For an account of the development of automatic throwing machinery, see *infra.*, p. 113.

Since 1890 the factors that were then influencing the geographical distribution of the silk industry have been steadily growing in importance. The result has been, as might be expected, a most remarkable growth of the industry in Pennsylvania. In 1890 Pennsylvania stood third in importance; in 1900 she was second.

SILK PRODUCTION IN MILLIONS OF DOLLARS.

| | 1890 | 1900 | 1905 |
|---|---|---|---|
| New Jersey | 30.7 | 39.9 | 42.8 |
| Pennsylvania | 19.3 | 31. | 39.3 |
| New York | 19.4 | 12.7 | 20.1 |

In 1905, according to statistics, New Jersey appears still to be slightly in the lead, but in the words of Mr. Franklin Allen, who compiled the Bulletin Report:[6] "When the figures are analyzed, Pennsylvania is in reality now the foremost silk manufacturing state in the Union."

The reasons for this growth are in effect the same that caused the migration of the thrown silk industry there in the first place. An excellent illustration is furnished by the trend of events following the invention of the high speed automatic ribbon loom. This case is nearly parallel with that of the thrown silk machinery. The new loom requires less skill to run it, and has given employment to a new class of labor; whereas on the looms formerly in use men were needed, now women are generally employed.[7] New Jersey has long been the leading state in the manufacture of ribbons; yet since the invention of the high speed automatic loom in 1890 New Jersey's ribbon output[8] has increased less than

[6] U. S. Census *Bull.*, No. 74, p. 195.

[7] U. S. Census 1890, *Manuf. Ind.*, Pt. III, p. 208.

[8] From $9,000,000 to $10,000,000.

$1,000,000, while in Pennsylvania the production of $1,-195,231 in 1890 had jumped to $5,573,799 in 1905.[9]

Within the past ten years, there have been wonderful strides in the development of the power loom. The new inventions and improvements have all tended in one direction—toward making the machinery more and more automatic. As this goes on, the need of strong and skilled labor constantly declines. The machines are taken away from the male operatives and put into the hands of women. The manufacturer moves his establishment to Pennsylvania.

The change in the geographical distribution of the industry and the change in character of the labor supply go hand in hand. A glance at some of the statistics at once reveals the character and extent of the transition. First as to the throwing industry, and the employment of children.[10]

From 1880 to 1890 the number of children declined from 5566 to 2866. After 1890 children were put at throwing machines, and the number increased to 6413 in 1900 and 7366 in 1905. Looking at the figures for Pennsylvania alone, we discover that over two thirds of the children are employed in that state, the proportion rising rapidly from 1890 onward. In the whole United States only 9 per cent of the silk operatives are children, in Pennsylvania nearly 20 per cent.

It might be mentioned in passing that the proportion of children employed seems at present to be slightly on

[9] U. S. Census *Bull.* No. 74, p. 193.

[10] Census *Bull.* No. 74, p. 186.

| | Men. | Women. | Children in U. S. | Children in Penn. |
|---|---|---|---|---|
| 1880 ......... | 9,300 | 16,396 | 5,566 | 319 |
| 1890 ......... | 17,600 | 28,914 | 2,866 | 1,293 |
| 1900 ......... | 24,206 | 34,800 | 6,413 | 4,249 |
| 1905 ......... | 27,037 | 45,198 | 7,366 | 4,734 |

the decline, even in Pennsylvania. This may be attributed largely to child labor legislation, but it has been said also that women have been found more satisfactory in some of the tasks that formerly were given to children.[11]

The changes in the last eight or ten years, as noted, have resulted in the displacement of men by women at machines in which the greatest strides in automatic development have been made. This is abundantly demonstrated by the figures since 1900.

Employed in Silk Manufacturing.

| | Men. | Women. |
|---|---|---|
| 1890 | 17,600 | 28,914 |
| 1900 | 24,206 | 34,800 |
| 1905 | 27,037 | 45,198 |

It will be observed that from 1890 to 1900 the number of men employed increased about one third, while the number of women in the same period increased only one fourth; from 1900 to 1905 the increase in the number of men was very small, while female employment advanced remarkably. To put it another way: there were in 1905 21 per cent more laborers in the silk industry than in 1900. Of this 21 per cent increase, 73 per cent were women and 16 per cent were men. In the whole industry today, 56 per cent are women, 34 per cent are men. But in Pennsylvania over three times as many women are employed as men.[12]

The effect of these transitions is shown in the figures for the production of silk goods. If we compare Pennsylvania with New Jersey, the state that has been the chief seat of the silk industry for nearly forty years, we find that the recent developments in labor supply, machinery, and geographical location have produced some remarkable results. We have already spoken of the

[11] U. S. Census *Bull.* No. 74, pp. 186ff.

[12] *Ibid.*, pp. 186-7.

change in the proportion of ribbons made in the two states. The declining importance of the older ribbon producing centers is strongly evidenced by the distress among New York and New Jersey manufacturers of these articles.[13]

Let us glance at another article, piece dyed broad goods. These are piece goods of simple patterns, made by machinery that has been almost completely revolutionized in the last few years. Since 1900 the production of these goods has increased in New Jersey from 1.6 million yards to 3.8 millions. The increase in Pennsylvania has been from 1.7 millions to 7.3 millions of yards, during the same five years.[14] Even for skein-dyed broad silks, both plain and fancy, the figures are almost as remarkable. The production of New Jersey practically stood still, at $19,000,000; the output of Pennsylvania had increased from $10,000,000 to $15,000,000, nearly half as much again.[15] It is interesting to note that the output of Pennsylvania in the plainer, simpler, piece-dyed goods is nearly twice as great as that of New Jersey.

The influence of the factors that have brought about these remarkable changes is by no means at an end. Improvement in machinery is constantly going on, resulting in constant changes in the labor factor. The effect of this evolution on the cost of production of silk fabrics, and on the ability of our manufacturers to compete with the European establishments is reserved for discussion in Part V. For a full understanding of the factors connected with foreign competition, there is necessary a survey of the duties imposed by the different tariff acts, together with a consideration of the conditions of production as they exist today in the American industry.

[13] See especially *Thirty-second Ann. Rept. Silk Assn.*, p. 48 and *Thirty-fourth Ann. Rept. Silk Assn.*, p. 95.

[14] U. S. Census *Bull.* No. 74, p. 178.

[15] *Ibid.*, pp. 192-3.

# PART IV

## SURVEY OF THE RATES OF DUTY IMPOSED BY THE VARIOUS TARIFF ACTS.

### 7. LEGISLATION 1864 TO 1883: SPECIFIC AND AD VALOREM DUTIES.

The Tariff Act of 1864, which imposed a duty of 60 per cent on silk goods, was instituted entirely for purposes of revenue.[1] The absence of any protective sentiment is proven by the fact that sewing silks, twists, and spun silks, which alone constituted the items of domestic manufacture at that time, were set in 1864 at 40 per cent and 35 per cent, simply as articles less calculated to yield a large return in money. The war tariff put spun silks, for example, at 35 per cent, doubtless because it was thought that this class of goods would not yield a satisfactory revenue if put at a higher rate. Spun silks are goods made from waste and defective silk fibre, which is treated like cotton or wool fibre before being woven: in other words, it is *spun*, as distinguished from the more perfect filaments, which are reeled direct from the cocoon. Spun silks are therefore less satisfactory and less valuable than reeled silks, and attract a class of people whose demand is easily frightened away by a very slight rise in the valuation. A duty above 35 per cent would, therefore, seriously curtail the importations. The main duty of 60 per cent was imposed on silk goods with the idea that they were articles of luxury. Spun

[1] The duty had been 24% until 1861. In that year it was advanced twice, first to 30% and then to 40%. Allen, *Chronology*, p. 43.

silks have not nearly so clear a title to the term luxury.

There is not, nor has there been since 1857, a duty on raw silk. It comes to this country in hanks of a certain length, reeled but not otherwise treated. If the process of manufacture were carried one step beyond reeling it would become gummed silk, which pays the same duty as the spun silks.

The Civil War duties continued in force until 1883, unchanged and unattacked save by the forces that were contending for a general reduction of the heavy rates that had been called forth by the nation's necessities. As the exigency was now past, it was felt that the war tariff had fulfilled its appointed task and should be at once discarded. The only difficulty was that the tariff had more than done its duty; it had not only provided the government with money, but had also provided the country with a growth of new industries whose very life depended on a continuance of the high scale of duties.

It is not to be wondered at, in view of these circumstances, that the Tariff Act of 1883 could not be framed in such a way as to commend itself to all interests. The outcome showed, as might have been expected, a reduction in the rates, but a reduction of so slight a nature as not materially to harm the principle of protection. The general ad valorem rate on silks was reduced from 60 to 50 per cent. The duties on thread and on spun silks were reduced from 35 to 30 per cent.

The consequences of these changes were naturally slight. There are no statistics, no calculations, no sources of information of whatever kind that indicate any change in the amount or character either of the importations or of home manufacturers. There was no complaint about the insufficiency of the protection granted

by the lower rates. The net result seems to have been a reduction amounting to some 16 per cent in the customs duty on articles that were before imported anyway, and a consequent lowering of the price to the consumer.

In truth, the manufacturers had little cause to complain. The industry was growing so rapidly in the eighties that the tariff came in for less than its usual share of attention in the expressed opinions of manufacturers and jobbers. But in the history of industries that look to Congress for aid and protection, it seems impossible to find a condition, however prosperous, in which some grounds of complaint and some appeals for further assistance may not be discovered. So it is with the silk and a number of other protected industries of this period. The complaint in this case was not that the amount of the support was inadequate; it was directed against the form in which that support was granted. The different systems on which customs duties are levied have such a peculiar significance for the silk industry that perhaps it may be worth while to pause a moment to consider them.

From 1846 to 1861 all of our tariff duties had been fashioned on the ad valorem plan, following the principles laid down in Robert J. Walker's Report of 1845 and the subsequent tariff act of 1846. The Act of 1861 and the subsequent war tariffs had departed materially from this principle in regard to some classes of goods, whereas with others, among them silks, the ad valorem principle was retained. This is perfectly natural; some things can be easily described both as to quantity, quality, and degree, and the entire amount of the duty based thereon cannot possibly be avoided short of actually smuggling in the goods. Other things, however, while they may easily be designated as to the nature of the

article and the amount, cannot possibly be described so as to differentiate the various grades and qualities the one from the other, and so permit a rate of duty on each that shall bear equally on all. The natural method of dealing with the latter is to tax them according to the value. Pig iron, for example, is pig iron the world over, and bituminous coal is on the whole bituminous coal. These may safely bear a duty specifying that so much shall be paid for each ton, and there is little danger that some pig iron will be paying 10 per cent of its value, while other kinds of pig iron will be paying 500 per cent. Most textile goods, however, occur in varieties almost infinite: they are thick, thin; closely or loosely woven; heavy, light; made of material good, bad, or indifferent, dyed in a bewildering number of ways; mixed with other fibres in every conceivable proportion. In fact it is impossible to select any of these specifications or any combination of them in such a way as to distinguish accurately by this means goods of lesser value from the more valuable kinds. A duty on woolen goods specifying that, say, $1 shall be paid on each yard would make some cheap worsteds pay several times their value as an import tax, while the finer goods would surrender only a small fraction of their money price to the customs officials.

The chief fault to be found with a specific duty is that it is not uniform in its incidence either as to different grades of the same article, or as to the same grade over a period of time. For as improvements in manufacture go on and the price goes down, the specific duty exacts a constantly larger proportion of the value. But, while difficult in theory to apply equably, the specific duty has the crowning practical advantage of being easily and certainly assessed. If coal pays 75 cents per ton, the

quantity imported can be weighed and controlled with comparative ease and certainty; every ton of it that is imported must pay exactly 75 cents to the government. An ad valorem duty, while it is perfect in theory and avoids all the faults of the specific rate, in practice lends itself to fraudulent devices of every description. The same article may be rated at different values in different ports, or at different times in the same port. Perhaps the greatest fault is that the importer may swear falsely to the invoice, and is always under the temptation to rate the value at the lowest plausible amount. This device is particularly dangerous because it may take many forms. The goods may be consigned to some irresponsible clerk who knows nothing about the qualities of the articles and will swear to any valuation that his principals command. These are only a few of the difficulties that arise under an ad valorem system.

The natural result is that the advocates of protection strongly favor the specific method, both because the full amount of the duty is collected and because the amount of protection increases unperceived as improvements in methods of manufacture bring about lower prices; while the anti-protectionists favor the ad valorem rate, both because it is equable in principle and because it reveals unmistakably the precise amount of protection granted.

We have seen that the Civil War acts had abandoned the ad valorem principle in the case of some classes of goods, but retained it in others. It was natural then that manufactures not protected by a specific duty on the articles they produced should feel that they were not enjoying the full benefit of the shelter against foreign competition which others more fortunate were receiving in that manner. Attacks directed against the ad valorem system had been more or less constant ever

since our own first Act of 1789; but it was after the Civil War acts, and particularly after the Act of 1883, that protests became loud and vehement. If credence be given to even a small part of the testimony of the aggrieved manufacturers, of business men, and even of economic theorizers, frauds of much more than ordinary enormity had arisen. The tariff hearings of the Fifty-first Congress contain page after page of evidence that goods of all kinds, and silks in particular, were being rated at from 50 to 75 per cent below their real value.

Quite aside from opportunities for fraud due to the ad valorem system, clever importers began to discover weak places in the Act of 1883, and a bewildering variety of new schemes and of variations on the old were being employed to escape the duties. Schedule I, 324 (a), of this act reads, "hat trimmings of straw, feathers, lace, *ribbon-ends,* etc., 20 per cent ad valorem." Immediately an enormous demand for silk ribbon hat trimmings sprang up, so greatly out of proportion to the hats to be trimmed that, according to the witnesses before the Finance Committee, the American industry was brought to a standstill.[2] The testimony goes on to state that our ribbon looms had to be shut down entirely, the home dealer satisfying the demands of his customers from the imported "hat trimmings."

Statements like these are doubtless exaggerated, but in so far as they are true they form an interesting commentary on the then state of our ribbon industry. The manufacture of ribbons in this country was at that time comparatively new, and was undoubtedly very dependent on a protective tariff. With 20 per cent of protection our manufacturers seemed unable to cope with the foreigner in the production and sale of ribbons. It is

[2] *Tariff Test. Senate,* 1888-9, pp. 1222-3, 1846, etc.

however doubtful if, even at that time, all the mills were shut down or were run at a loss.

Another practice took advantage of the fact that the package in which goods were shipped was not included in appraising the value of the imports. Soon it was discovered that matches were arriving packed in beautifully wrought gold and jewelled cases. Thousands of dollars worth of 20 per cent "hat trimmings" arrived most carefully wrapped in yard upon yard of expensive broad silks, lace goods, velvets, and plushes. Many of these practices were such as commonly appear in any tariff system and would not be eliminated by a change to a "specific" schedule. Yet they added to the outcry against the prevailing system and to the demand that something new be tried.

Not only the manufacturers, but also all importers not willing or able to resort to questionable practices protested against a mode of levying duties that had so many vulnerable spots. It was argued that the act was loosely and carelessly framed; that its ad valorem basis was not sufficiently protective; and that on many classes of goods, particularly silks and fine textiles, enormous frauds were being perpetrated against the customs officials, frauds partly due to the loose wording of the act and partly to the weaknesses inherent in an ad valorem system. By 1886 the situation had become unbearable. In that year Mr. Briton Richardson of New York City called a meeting of all the silk importers of New York to devise some scheme by which an import duty could be arranged on the "specific" schedule plan.[3] The difficulties were known to be enormous, as it is almost impossible to discover any easily recognizable peculiarities through which silks of

[3] *Tariff Rev. Hearings*, 1889-90, pp. 595ff. Cf. also *Ann. Silk Assn. Repts.* for all these years.

lesser value can be distinguished from the higher priced articles. A dozen different plans were submitted, discussed, and rejected. Finally, the silkmen adopted the simplest plan of all, comprising a pound duty plus a yard duty; that is, goods were to pay duty according to the *weight* per yard, the lighter goods paying more on the assumption that the value per pound was greater. This plan was sent to Secretary Fairchild of the Treasury Department with the request that he let the customs appraisers try it to see how it would work out. The appraisers then applied the new scheme to some 600 samples of cloth, but, as might have been expected, with most disappointing results.[4] The plan is one which takes no account of the quality of the fabric, nor of the fineness of the workmanship. Light and flimsy goods would pay the highest rate, while heavy chasubles of exquisite workmanship would come in on the same basis as coarse and clumsy weaves. In this, as in practically all American experience with duties on woven fabrics, it was found impossible entirely to abandon the ad valorem principle. The appraisers returned a report to Secretary Fairchild in which they showed the impossibility of a yard duty plus a pound duty, and recommended a pound duty combined with an ad valorem duty as the only schedule with specific features that stood any chance at all of working satisfactorily.

## 8. THE ACT OF 1890.

Such was the situation preceding the tariff of 1890. The Act of 1883 had been satisfactory to no one and had been followed by bills and counter bills in both houses of Congress in 1884, 1886, and particularly in

[4] *Tariff Rev. Hearings* (before Committee on Ways and Means), 1889-90, pp. 594ff.

1888. In the latter year each of the two great parties brought forward a tentative tariff act, neither of which was intended to be ultimately passed, but designed to set forth party principles on the tariff question and to test the temper of the country as regards the line of policy each stood ready to deliver according as popular opinion showed itself in the ensuing election. The Republican victory in 1888 therefore seemed to justify a conclusion that the popular verdict had spoken clearly in favor of the policy of protection. The election, however, was close, and while the Republicans held a strong majority in the House, their majority in the Senate was not so great as to overthrow completely the Democratic opposition and the conservative traditions of the senatorial body.

The result was that, so far as the silk schedule is concerned, a very interesting little drama was enacted. The Republicans and the silk manufacturers stood squarely for a specific schedule; the Democrats and the conservative element in the Senate were banded together to uphold the ad valorem system. The deliberations of the House, therefore, brought forth a document filled with new and strange features. The old body of duties was hardly recognizable; new measures, representing the specific schedule ideas of its creators, had been inserted wherever an opening seemed to present itself.

In regard to the silk schedule, this bill[1] as first reported by the House, marked a particularly radical departure from all preceding acts. It will be convenient to divide the discussion of the silk items in this bill into three classes,—dress goods, pile fabrics, and laces.

The dress goods schedule was a complex affair, concocted according to the proportion of pure silk in a piece

[1] H. R. 9416.

of cloth, according to weight, and according as it was black, white, or colored. In addition to specific duties based on all other criteria, a straight 15 per cent ad valorem rate brought up the rear in every case. A single glance at the following table will show how complicated the system was.

| | | | |
|---|---|---|---|
| I. Piece goods weighing from 1 oz. to 1⅓ oz. | | | |
| Undyed, per yd., containing | 10% to 25% silk | $ .75 | +15% ad. val. |
| | 25% to 50% silk | 1.25 | |
| | 50% to 75% silk | 1.60 | |
| If black | | 1.60 | |
| If white or colored | | 2.25 | |
| II. Piece goods weighing from 1⅓ oz. to 8 oz. per sq. yd., containing | . . etc., etc.[2] | | |

One remarkable thing about the House bill is that, although it was not passed and so seemed destined to become dead history, it reappeared seven years later, and with some variations is the exact model on which the Tariff Act of 1897 was built. Another remarkable thing is that so far as can be discovered hardly a word was said about the new silk schedule in the House. It seems to have been prepared by a committee of men interested in silk manufacture and to have been pretty well threshed out by the Committee on Ways and Means. There are numerous petitions in the reports of the tariff hearings before this committee,[3] asking for changes in one section or another of the specific schedule. Much testimony is also given as to how, when, and why the Committee on Ways and Means had arrived at this particular schedule. But in the House debates nothing was said about the silk schedule in detail. Probably few representatives were

[2] This tabulated and abbreviated form is that employed in the congressional debates. It is used here for convenience, as the wording of the actual bill would be intelligible only after careful study.

[3] *Tariff Rev. Hearings*, 1889-90, pp. 590ff.

intimately enough acquainted with the silk industry to be able to discuss the rates intelligibly. Moreover, they were interested in other items. Similarly the great increase in the rates on pile fabrics passed unnoticed, as we shall see later.

What degree of protection this specific schedule would have afforded is a matter of conjecture. We have seen that there was no need, even no demand for higher duties as such; and the framers of the specific schedule claimed that the new bill contained only the old ad valorem rates specialized in order to do away with the frauds incident to the old-fashioned system. In fact, Mr. Briton Richardson asserted that many of the rates went below 50 per cent.[4] Mr. F. W. Cheney, a manufacturer of South Manchester, Connecticut, went even farther. He maintained that the rates would average only 40 per cent or so ad valorem.[5] "All we can say about it", says Mr. Cheney, "is that we think the rates very low on the better class of goods, goods which are worth from $2.50 to $3.00 per yard. The duty on that will be only about 25 per cent. On goods worth $1.00 a yard, weighing about two ounces to the yard, it will be 30 per cent, and when you get down to the lower grades you will get 50 per cent and over."

So far as can be gathered from a comparison of the rates on the House bill with the tariff of 1897, it appears that the rates would have run considerably over 50 per cent. Whenever the two bills approach each other, there seems little to choose between them, and the 1897 schedule averaged much higher than 50 per cent. It was not claimed in 1890 that more than 50 per cent was wanted or needed for dress piece goods manufac-

[4] *Tariff Rev. Hearings*, 1889-90, p. 596.

[5] *Ibid.*, p. 595.

tures. The testimony in the tariff hearings is all to the effect that 50 per cent was sufficient, but that the witnesses wanted it collected on a specific basis. In 1897 there was abundance of evidence that a large proportion of manufacturers were satisfied with the then existing duties, and were surprised that the rates had been raised.

Here then rises an anomaly which must have struck every one who has studied the processes by which our present protective tariff system has been built up. Congress frequently seems to have given domestic producers more than they have asked for,[6] and admittedly more than was necessary to keep the industries on their feet. In the tariff hearings of 1893 several witnesses testified that the manufacturers of pile fabrics were getting along satisfactorily on 45 per cent.[7] Mr. Fred J. Remer, representing the Astoria Mills of Long Island, said, "If you will ask any American manufacturer, he will tell you that 50 per cent is satisfactory." This was an industry which was given a protection of over 70 per cent in the very act under consideration, as will be seen later. It seems absurd to suppose that a legislature elected on a protective platform is determined to distribute protection lavishly on every hand whether the corresponding industries need it or not. Yet we must either believe this or come to the conclusion that in times when the home manufacturers can urge no open plea for further assistance they bring hidden influence to bear upon legislators so that bills, when presented, contain unexplained increases in some of the items.

This conclusion is borne out by the history of the duties on pile fabrics in this act. The manufacture of

[6] Cf. *Tariff Hearings*, 1896-7, where Mr. Chapman said he asked for no more than 45% on his products, but was given 50%. Vol. 2, p. 1737.

[7] *Tariff Hearings*, 1893, pp. 1022-40.

velvets and plushes had been started in the United States in 1887 and 1888. As appeared later, some of the men interested in this branch of the industry were very influential with both houses of the legislature, and were practically given *carte blanche* in devising the tariff rates on their products. This is made certain from testimony gathered in the tariff hearings in 1894. In that year Mr. John W. Stewart, 55 and 57 White Street, New York City, stated that the making of plushes began in this country in 1888 without especial assistance in the way of tariff duty. By 1890 it had attained considerable importance as to size, though the product was a very inferior article. In the 1890 House bill as first drafted, pile fabrics were given a duty that would raise the rate on them from 120 to 134 per cent, according to then prevailing prices.[8] Mr. Stewart stated that this measure was due to the preponderant influence of one firm, the J. and J. Dobson Company, who were the sole beneficiaries of the new rates. On the passage of the bill in the House, they raised their prices 10 to 25 per cent.

The velvet schedule on the House bill of 1890 read:

| | |
|---|---|
| Pile fabrics, containing more than 50% silk........ | $3.50 lb. +15% |
| containing less than 50% silk.......... | 2.00 lb. +15% |

These rates would bring the duty up to 120 to 134 per cent ad valorem. This of course was not allowed to stand; the Senate revised the items considerably; but we shall see later that the influence of J. and J. Dobson and some others interested in the velvet manufacture produced a remarkable effect on the rates appertaining to their products in the final bill.

In addition to a higher schedule on dress goods and pile fabrics, the House bill carried an unnoticed eleva-

[8] *Tariff Hearings*, 1893, pp. 1020ff.

tion of the item on laces to 60 per cent. There is no explanation by the framers of the bill of the change in the lace duty. Laces, however, lend themselves to a specific duty probably less than any other thing that passes under the eye of the customs official. They occur in such a wide range of values and forms as completely to defy description, at least description of the official kind. The inference is that the lace manufacturers, being denied a specific rate on their products, contrived to have the ad valorem rate raised to a par with that on broad goods. Only a word dropped here and there indicates the grounds, if any, on which the higher duty was based. It is said that laces are a more specialized product than the broad and narrow goods, require more labor, and so lend themselves less readily to American large scale mass production. Some of the lace manufacturers seem to have felt uneasy, not because the lace business was not growing, but because it was not growing as fast as some other lines, so that they were earning less on their invested capital than other silk producers. There is evidence[9] that the lace makers in this country, (together with the makers of knit goods)[10] were and have always been less prosperous than those interested in the less specialized branches of silk making. It is perhaps for these reasons that the 60 per cent on laces was kept by the Senate and remained in the bill as finally passed.

The Senate greeted the House bill at once with expressions of marked disapproval. The protectionists, it was felt, had gone too far. Every single duty in its elaborate specific silk schedule was cut out deliberately and reduced to the previous rate, 50 per cent at valorem.

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[9] *Tariff Hearings,* 1896-7, Vol. 2, p. 1744. Cf. Testimony of E H. Davis, of American Hosiery Co., New Britain, Conn.; also E. H. Billyeu, of Philadelphia Knitting Mills, Philadelphia, Pa.

[10] See on this point the *Tariff Hearings* of 1909, *First Print* No. 35, pp. 5150-54.

The remarkable pile fabric rates received the same punishment, a plain 50 per cent. The 60 per cent lace item alone remained untouched, the Senate apparently being willing to make some slight concession lest the entire schedule become a farce.

The bill then went to a conference committee of both houses. The committee apparently had strong leanings toward the conservative attitude taken by the Senate. The bill came back with all the important items as the Senate had left them: dress and piece goods and ribbons remained at the old rate, 50 per cent. But the velvet and plush schedule showed the powerful influence of Mr. Dobson and his friends.

It will be remembered that three years afterward Mr. John W. Stewart, of New York, stated that the pile fabric rates of the House were proposed by J. and J. Dobson. In this testimony he was confirmed by others.[11] "But," continues Mr. Stewart, pointedly, "when these rates" (*i. e.* the higher rates of the first House bill) "were fully studied out by those who proposed them, they came to the conclusion that they had asked for so much that the building of their own construction would most likely fall and crush them because of the inducement given to foreign manufacturers to come here and enter into competition with them."

"Accordingly," Mr. Stewart goes on to say, "the sales agent and mill manager of the Dobsons called at our place of business, stated this fact, and asked for samples of our goods, with weights and prices, that they might reconstruct their recommendations so that a new scale might be arranged, which, while less likely to tempt foreign manufacturers to come here, would be sufficient to give them (the Dobsons) all they wanted." Mr.

[11] *Tariff Hearings*, 1893, pp. 1022ff.

Dobson is asserted to have said that he had no doubt as to his ability to effect any desired alteration, as he had a very influential backing.

"This", said Mr. Stewart, "was after the House had passed their bill, and we can only presume from what followed that he possessed all the influence he claimed."

Mr. Stewart was right. Velvets and plushes, alone of all the products in the silk list, remained on a specific basis in the Act of 1890 as finally passed. The figures, however, are changed. The House bill had read:

| Velvets and Pile Fabrics. | |
|---|---|
| More than 50% silk.................. | $3.50 lb. + 15% |
| Less than 50% silk.................... | $2.00 lb. + 15% |

The latter of these two items contemplated an excessive rate on the cheaper goods—the kind most largely made in this country at that time. The final Act placed the dividing line at 75 per cent of silk instead of 50 per cent, and made the rate on the cheaper goods $1.50 per pound instead of $2.00, while the 15 per cent at the end was left off altogether. It is probable that the alterations of Mr. Dobson were as much due to the action of the Senate in cutting his whole system down to a meager 50 per cent as to his self-interest. He probably felt that to retain his specific schedule at all it was imperative that the amount of duty be lowered. The Act as passed read:

| Velvets and Pile Fabrics. | |
|---|---|
| More than 75% silk........................ | $3.50 lb. |
| Less than 75% silk........................ | $1.50 lb. |

These rates were considerably lowered in subsequent tariff acts. Even in the high tariff of 1897, with specific rates on silk goods the rule and not the exception, the duty on all-silk velvets stood $1.50 lb. + 15 per cent; on plushes, $1.00 lb. + 15 per cent, making for a considerably lower ad valorem duty.

So far as can be discovered, very little was said in the House of Representatives in regard to the specific rates on silks, and nothing at all as to the duties on plushes and velvets, though many other and less considerable increases in the duties were fought out to the bitter end by the opponents of high protection. Days and even weeks were spent in the discussions of high and low duties in general, in threshing out such subjects as steel, wool, woolen, and agricultural duties, yet the startling change in the silk pile fabric duties seem to have escaped the notice of all. It is doubtful if consumers and importers of these fabrics knew of the remarkable increase in the duty on them, as it attracted so little notice. It was to the interest of those responsible for the new rates to keep them out of sight, and dissentient voices, if there were any, were not heard. Nor was there any discussion in the Senate; apparently the only reason the items were lowered there was that they came under the observation of the Finance Committee, which carefully went over every paragraph in the bill as reported from the House.

A glance at the workings of the pile fabrics duty shows just what the result of the specific feature was. Beginning with 1889 the importations of plushes and velvets, and the duties paid, reckoned on an ad valorem basis, stand:

| | Imports of Plushes and Velvets. | | Duties paid ad valorem. |
|---|---|---|---|
| 1889 | $5,407,000 | | 45% |
| 1890 | 5,070,000 | | 45% |
| | *Plushes* | *Velvets* | (Specific duty) ad valorem equivalent. |
| 1891 | $4,030,000 | $ 77,000 | 74% |
| 1892 | 2,450,000 | 112,000 | 76% |
| 1893 | 3,001,000 | 181,000 | 73% |
| 1894 | 1,935,000 | 117,000 | 60% |
| | | | average. |

The sudden jump from 45 to over 70 per cent in the duty somewhat curtailed the importations, as may be seen. The lowering of the average rate in 1893 and 1894 is explained by a clause in the Act which read: "But in no case shall the duty be less than 50 per cent." The result was that importers found it profitable to bring in foreign goods of such high quality of fabric and workmanship that the specific rate amounted to less than 50 per cent of their value. Consequently a considerable portion of the pile goods imported in 1894 came in at 50 per cent, bringing down the average ad valorem equivalent of the duty suddenly from 73 to 60 per cent. Thus the wealthy classes, that alone could afford goods of the highest quality, secured them at a rate of duty nearly the same as before the high specific rate was imposed; while those who were obliged to use imported goods of inferior quality paid a rate of 75 per cent, 80 per cent, or even more.

To sum up: the silk schedule of the Act of 1890 as finally passed contained two important changes: first, the increase of duty shown in the lace and pile fabric items; second, the beginnings of a specific system, attempted at first as to all the items, retained finally in the matter of plushes and velvets alone. The general character of the whole Act of 1890 is reflected in its silk schedule, and the issue of a marked extension of the protective system was squarely presented to the country

### 9. THE WILSON BILL OF 1894.

The answer of the American people was remarkably prompt. The elections in November, 1890, resulted in an overwhelming defeat for the party of high protection. In 1892 again the Democrats won both the presidential and congressional elections. Mr. Cleveland, strongly

opposed to high duties, sat in the White House, while in the houses of Congress the Republicans were outnumbered 260 to 164. It was natural then that the party of free trade should look eagerly forward to coming into its own again; and its first step must naturally be the repeal of the obnoxious Act of 1890.

Unfortunately for the hopes of the Democrats, circumstances were not in their favor. The party was almost rent in twain by the struggle over the repeal of the Silver Purchase Act. Again, while their majority in the House was nearly two to one, their hold on the Senate was extremely precarious—38 to 44—so that, instead of being a compromise between the views of the two houses, the final act was as the Senate demanded. The House was forced to accept all the amendments of the upper body, preferring to do so rather than lose the measure entirely. President Cleveland showed his disappointment by ignoring the bill, which became a law without his signature, August 28, 1894.

In the matter of silk duties the House bill contemplated some material reductions. On dress and piece goods the former rate of 50 per cent was to be retained, and the lace items were to be brought down from 60 per cent into the same class with the dress goods. Braids and webbings were separated and put at 40 per cent. The most significant change was in the pile fabrics, the high specific rates on which were clipped and reduced to a simple 45 per cent ad valorem. All manufactures not specifically named were to come in at 45 per cent also.

These items, passed without much debate in the House, became veritable bones of contention in the Senate. The disaffected Democrats protested vigorously that while raw materials and the necessities of life might have some

claim to a reduction of duties, silk goods were luxuries and should be heavily taxed. An attempt was made even to raise piece goods, handkerchiefs, and laces to 60 per cent, the high rate of the Civil War. The attempt failed however, and the 50 per cent of the House was accepted without debate. Braids and webbings, set at 40 per cent by the House because they were not extensively made in this country, were at first set at 50 per cent but finally left at 45. The real conflict turned on the pile fabrics. The questions at issue here are interesting and will bear some scrutiny.

It seems that when the J. and J. Dobson Company put their heavy specific rates on plushes and velvets into the Act of 1890 they overstepped the mark. The duties proved in many cases to be very high—from 70 to 120 per cent, rates which, combined with the paucity of American made products, caused an immediate rise in prices. Thereupon a number of enterprising foreign manufacturers decided to transfer their establishments to this country.[1] This indeed Mr. Dobson himself seems to have foreseen and feared. The transfer was quickly made; and hence between 1890 and 1893 nine large factories for the making of silk plushes and velvets were established, more than enough to supply the whole American demand.

At the beginning the strangers, together with the Americans already started, flourished. It was the period when plush sacks, "seal plush" coats, and so on, were indispensable to every woman's wardrobe, from miner's wife to millionairess. But trouble arose. It was discovered that the American product was of very poor quality; a black "seal plush" coat that looked a marvel of beauty when first put on had a reprehensible tendency to wear

[1] *Tariff Hearings*, 1893, p. 1022.

bare and white in spots, and to lose its "fur" by square inches.

This was undoubtedly due to the lack of skilled labor, lack of effective supervision incident to the establishment of a new industry, and to the hurry-up system too often characteristic of American factories, which subordinate careful work to speed, and quality to quantity.

The English article, on the contrary, held its good appearance. The demand for American plushes ceased almost as suddenly as it had begun, and just at the time when new factories were going up and constantly larger supplies flooding the market. The seal plush fad became limited to the few who could afford the English variety, and when the crisis of 1893 broke, the seal plush mania disappeared entirely.

The position of the new plush and velvet factories now becomes plain. As shown in the tariff hearings, of the nine large concerns, all were in a very bad way, most were on the point of asking for a receiver, and some had already done so.[2]

[2] Testimony of Fred E. Kip, President, Salts Textile Manufacturing Company, *Tariff Hearings*, 1893, pp. 1033-44.

The state of affairs in the seal plush and velvet industry is well revealed by two letters written by manufacturers during the period 1890-94. The first was written by one of the proprietors of the Unicorn Mills at Catasaqua to their superintendent during a strike.

"April 21, 1892.

"Dear Sir:—

Whenever the weavers want to come in again, on our conditions—that is, we want good goods, and no trashy goods, as they have made heretofore—we will reopen the mill, but not before that, under any circumstances. This is a question of life and death to this entire industry, consequently just as much for us as for the hands. *There are now large stocks of such trashy* seal plushes of domestic manufacture held here, which nobody wants, and we shall certainly not go to work to still further increase them. If we make better goods we get better prices, and if we get better prices we can pay better wages.

"Yours truly,

'C. A. Auffruordt & Co."

This state of affairs, confessed by the manufacturers themselves, had been brought on by the high specific rates on these products in the Act of 1890. Evidently from this example, to give a young industry too much protection is to spell its ruin. The high tariff is followed by high prices and big profits. Competition then sets in, prices are lowered, and worse still, the goods become cheaper and trashier[3] until the whole industry falls into discredit—in this case, bankruptcy.

To remedy the plight of the American plush manufacturers, two very different lines of treatment were suggested. The first assumed that all the trouble was due

Again from Mr. Wm. Degener of this company.

"September 10, 1892.

"The domestic manufacturers of seal plush have not had a very easy time so far. Seal plush is one of the most difficult articles to manufacture, and a great deal of time and money has been sacrificed by those who ventured into it, to attain something near that degree of perfection in color and finish which is absolutely necessary for its easy sale, and which state it appears can only be reached by long and costly experiment. Not every one, then, has succeeded in it. Soon after the start of this difficult industry, a few years ago, by but two factories, the change brought about by the McKinley bill made a few of the English seal plush manufacturers believe that there was nothing more profitable than to transfer their plants here and rush into manufacturing the article in this country; so they did. As soon as the newcomers appeared in the market with their makes, the times became more difficult for all. Instead of holding up the market, as the first few starters had done, an unhealthy competition was inaugurated. There was a constant fight among the four or five mills for prices, and prices sank quickly to a level at which now none of them can live. As to upholstery plushes, the less said about them the better. There would be just a little profit in them for the manufacturers, if some generous hand would come forward and make a present of the silk required.

"Wm. Degener, of C. A. Auffruordt Co."

[3] As to the quality of the goods, this brief extract from the trade journal of the American Cloak Mfrs., to which trade all these goods go, bears eloquent testimony:

"No fabric has suffered more from the cheapening process than the seal plush. The market has been flooded with inferior goods, the results of the experiments of the new manufacturers." *Tariff Hearings*, 1893, p. 1030.

to foreign competition, and that the remedy was to raise duties still higher, while adopting stringent measures against fraud. The advocates of the other remedy pointed out that the duties on this class of goods were already so high as to be almost prohibitory, and that foreign importations had nearly come to a standstill.[4] The trouble could not therefore be due to foreign competition; to make the duties higher would produce no change in the situation. They further maintained that the American producers, unable in the beginning to turn out an article as good as the imported, had entered into ruinous competition with one another, because the high tariff of 1890 had offered such an extraordinary inducement to enter the field that more factories were built than were necessary to supply the American demand. This competition had resulted naturally in a rapidly increased production coupled with an accompanying deterioration of quality, until homemade velvets and plushes became so cheap that nobody wanted them. The industry of course was in a bad way; but it was the high tariff that had got them into the slough, and a higher tariff could hardly pull them out of it. Indeed it was inconceivable that a higher tariff could affect the situation one way or another.

Arguments like these were overwhelming, and the Committee on Ways and Means set the tariff on pile fabrics at 45 per cent lower than that covering the more important items of laces, handkerchiefs, and piece goods. The House followed the Committee's recommendations without comment of any kind, as indeed the subject had been thoroughly threshed out already. The Senate looked at the matter more conservatively, however, and refused to commit itself to a measure which seemed to that body to spell absolute disaster to the industry in America.

[4] Cf. Tables of importations for 1893-94 on page 72.

After long deliberation the Finance Committee finally recommended that the specific duty be continued, but that the amount be lowered to $1.50 a pound for velvets and $1.00 a pound for plushes, a most material reduction from the previous rate, which had gone as high as $3.50 per pound. This recommendation was also the basis of the rates in the Tariff of 1897, the only difference being that in each case 15 per cent ad valorem was added to the specific rate.

It will be noticed that in this act the rate on velvets is higher than that on plushes. There are several reasons for this. The chief difference between velvets and plushes lies in the length of the pile. The longer pile of plush goods[5] makes the manufacture of these fabrics more difficult: to give them a smooth and uniform finish requires considerable skilled hand labor. They are therefore more valuable, on the average, than velvets.[6] Broadly speaking, plushes are put into personal wearing material, while the velvets made in this country find their largest use in upholstery, curtains, and carpets. This statement must be taken with considerable reservation. Velvets are often made into dresses, and this is particularly true of the finer imported velvets, which are more largely used for wearing apparel than for other purposes. Domestic velvet goods can therefore be made in large quantities of a single pattern, while their quality is not so closely scrutinized as is that of an article of apparel. There were, therefore, some uses to which American velvets could be put, whereas homemade plushes were almost universally admitted to be hopeless. In fact,

[5] The Act of 1909 designates as "velvets" fabrics with a pile of 1-7 of an inch or less; while "plushes" are those with a pile exceeding 1-7 of an inch in length.

[6] *Infra.*, p. 154.

American velvets held their own fairly well during this whole period, the importations of foreign pile fabrics consisting almost entirely of plushes.[7] It was thought that there was greater hope that the manufacture of velvets might amount to something, so greater encouragement was given in that direction. The $1.00 a pound on plushes was intended almost entirely to represent a revenue duty on a luxury, and to prevent foreign plushes from invading a field for which American velvets might possibly have a chance to contend. These considerations explain the reasons underlying the only considerable reduction in the silk schedule of 1894.

Little was said in 1894 about changing either one way or another the most important item of all, that of dress and piece goods. The manufacturers kept strangely quiet, said only that they were satisfied with 50 per cent, and asked that this figure be not lowered.[8] The importers were in agreement in saying that 50 per cent was a satisfactory duty for this class of goods, one on which they could continue to carry on the importing business in the future as they had in the past. Undoubtedly each side was fairly satisfied with the situation as regards dress goods, and was afraid of asking too much, especially as each wished to fight for a serious change (in opposite directions, of course) in the pile fabrics duties.

Though the Act of 1894 was highly unsatisfactory to the party which passed it, it was in the main a compromise measure such as would leave no especial bitterness rankling in the heart of either party. Nor was there any particular desire to change it; it seemed in fact that a serious and radical reversal of tariff policy within three

[7] Tables of importations on page 72.

[8] *Tariff Hearings*, 1893, pp. 1030-43.

short years was the last thing one might at that time expect.

### 10. THE DINGLEY TARIFF OF 1897.

The years following 1894 were marked in the economic world by severe business depression; in the political world by money problems and the contest for free silver. The result of the hard times was a serious and ever-increasing deficit in our national treasury. It was natural to blame the tariff of 1894 for this state of affairs and to suggest the need of a higher tariff as a remedy for the bad financial plight of the government. The contest for free silver discredited the Democratic party and put the Republicans firmly in power in the administration and in both houses of Congress.

Hence when President McKinley called the extra session of 1897, he asked Congress to deal only with the need of revenue for the treasury and with import duties. The House Committee had a bill already prepared; this was passed by the lower house almost without debate, being accepted as a party measure and passed under the pressure of party discipline. In the Senate affairs moved more slowly; the Committee on Finance made an attempt to lower the rates made by the House, but the Senate amended these again, with a tendency toward the higher duties voted by the representative body. The bill as finally passed embodied in the main the ideas of the advocates of high protection.

A mere glance at the silk schedule in the Act of 1897 shows at once the radical nature of the difference in character between this schedule and any other that ever had been passed before. All the important items had been switched over from the simple ad valorem system to a

complicated specific system, with the minimum principle elaborately developed, and many intricate schedules intended to single out for separate duties goods of every shade and degree. An example will suffice:

On silk piece goods,[1]

| | |
|---|---|
| 1. Containing 20% or less in weight of silk | |
| (a) if in the gum, | $ .50 lb. |
| (b) if dyed in the piece, | .60 lb. |
| 2. Containing 20% to 30% of silk | |
| (a) if in the gum, | .65 lb. |
| (b) if dyed in the piece, | .80 lb. |
| 3. Containing 30 to 45% in weight of silk | |
| (a) if in the gum, | .90 lb. |
| (b) if dyed in the piece, | 1.10 lb. |
| 4. Containing 30% or less in weight of silk, if dyed in the thread, or yarn: | |
| black, | .75 lb. |
| other colors, | .90 lb. |
| 5. Containing 30% to 45% in weight of silk, if dyed in thread or yarn: | |
| black, | 1.10 lb. |
| other colors, | 1.90 lb. |

Another distinction was made according to weight: the lightest goods (those weighing less than ⅓ oz. per yard) paying the highest duty of all, $4.50 a pound, and so on through the whole schedule.

In view of the various influences that had been brought to bear on the shaping of the silk schedule in the previous bills, and the various forms taken by those bills before reaching the final stage, this great change does not seem surprising. As far back as 1886 powerful influences had been brought to bear tending to put that schedule on a specific basis. The attempt failed for the time, as we have seen. The House bill of 1890 clearly reflected, however, the minds of the protectionists, and the forces that had been responsible for its appearance were con-

[1] *Rept. Com. and Nav.*, 1898. The tabulated and abbreviated form is used for convenience.

stantly at work along the same lines, so that a schedule of a similar character was bound to appear whenever circumstances favored. We need not be surprised, then, considering the conditions attending the passage of the Act of 1897, to find a specific schedule springing full-grown into being.

It is difficult to discover whether the disappearance of the old system of levying the duties may be attributed to new and distressing conditions in the silk business, or whether it was brought about simply because it was a measure dear to the protectionists, sure to be adopted when the time was ripe. In general, the silk industry had suffered along with all other lines of business during the melancholy period from 1893 to 1897; yet its growth and expansion during the decade were enormous, and would seem to give little cause for complaint. It is worth while at this point to consider what general grounds there were for or against changing the tariff so as to give the industry a greater degree of protection.

An examination of the more direct testimony yields results that are at first sight confusing. The abundant evidence given by the Committee on Ways and Means in the tariff hearings is unfortunately all of one color: disparagement of the ad valorem system and urgent demand for change. Anti-protectionists evidently were not encouraged to testify before the Committee. Yet in view of the constant trend toward specific duties seen in the tariffs of 1897 and 1909, much of this evidence is illuminating.

Mr. E. C. Hovey, of the Textile Manufacturers' Association of New York, was particularly convincing in his arguments on the need of a re-classification. He told of one case where fine goods had come in under a suspiciously low invoice: a chemical test showed that the

proportion of silk in the goods was so large that the raw silk alone was worth more than the invoice value of the merchandise. The importers were penalized $10,000 by the local appraiser. An appeal was made, said Mr. Hovey, to the Board of General Appraisers, who sustained the penalty.[2] The delinquents then went to Washington and by some means or other got the whole fine remitted on the ground that no intention to commit fraud had been proven. This was based on a decision of the Attorney General of the United States that an intention to commit fraud must be proven before a party can be penalized. After that, according to Mr. Hovey, no one hesitated about undervaluing goods, as the penalty for doing so was practically removed, and dishonest importers could go on swearing to false invoices time without end.[3]

Messrs. Bister & Schmitt, New York importers and commission merchants, had much to say of the stool pigeon invoice (the practice of consigning goods to a clerk who could honestly swear he knew of no other invoice or valuation than the one furnished him by the principals). They maintained that this practice had now become so prevalent that it threatened ruin to honest importers (like themselves) who kept their hands clean of such practices.

They also brought to light another device which seems to have made its first appearance about this time. In their own words, "Silks are now imported by so-called commission houses and sold for a certain commission, which leaves all responsibility as to the correctness of invoices to the foreign manufacturer." As the latter is of course outside the jurisdiction of the United States, no one could be prosecuted for a fraud of this nature.

[2] *Tariff Hearings*, 1896-97, Vol. 2, p. 1747.

[3] Much of this testimony is tinged with bitterness.

It will be noted that all these practices represent faults inherent in the ad valorem system; they appear because the basis of determining the amount of duty is the valuation of the imported article.[4] Bister and Schmitt recommended a specific and ad valorem duty combined, running up to 10 cents a yard, plus 30 per cent, on different varieties of silk goods; a series of rates that would seem absurdly low to a protectionist, though Bister and Schmitt calculated it would amount on the whole to 45 or 50 per cent ad valorem.[5]

In addition there was much testimony indicating distress among knit silk and lace manufacturers, who had had their protection cut down from 60 per cent to 50 by the act of 1894.[6] But of these, more later on.

On the other hand, there is abundant evidence that the silk industry was prosperous, and that the additional protection afforded by the Act of 1897 was not insistently demanded by all manufacturers.

In the first place, much complaint was made, especially in the Senate debates, that testimony in the tariff hearings was strictly limited to those advocating an increase of duties. In fact, Senator Jones of Arkansas presented a number of petitions from importers and jobbers, "who complained that the House Committee on Ways and Means refused to hear them, and gave ear only to Connecticut and New England manufacturers" who were known to be desirous of an increase of duties.[7] It is evident therefore that the tariff hearings *per se* are not a fair presentment of all sides of the question. Anything

[4] By 1909 manufacturers and importers alike seem to have agreed that the specific system is the most satisfactory in practice. Cf. *Tariff Hearings* for 1909, *First Print* No. 23, pp. 2993-3010; *Print* No. 53, pp. 8083-5, and p. 8090.

[5] *Tariff Hearings*, 1896-7, Vol. 2, p. 1747.

[6] *Ibid.*, p. 771, also pp. 1739 ff.

[7] *Cong. Record*, 1897, pp. 2005-10.

can be proved if prejudiced witnesses of the proper kind can be produced. Yet even in this protectionist testimony we find proof that Congress was inclined to generosity toward manufacturers.

Mr. William H. Chapman, a silk covered button manufacturer, appeared before the Committee to ask consideration for his industry. Silk covered buttons were coming in from abroad at 45 per cent (under "other manufactures" in the Act of 1894); the "button forms" which he used were all made abroad, coming in at 10 per cent; so it would seem that this manufacturer might be troubled by foreign competition, as he had to pay duty on his raw material. The Committee, therefore, asked him if he wanted more protection. He said he would get along all right if they would only not put up the duty on button forms. Again they asked him if he didn't want to testify to his need of a higher rate of duty on his products. No, he said, that would be all right if they would not meddle with the duty on the button forms, his raw material. When the same question came up in another form, Mr. Chapman said, "Let them (silks and silk buttons) continue as they are (45 and 50 per cent); I think other silk manufacturers would be satisfied with that."[8] In spite of such direct testimony that 45 per cent was all the manufacturers needed, the bill that went to the House and was passed by the Senate contained an elevation of the rate to 50 per cent. One might infer that the Committee was determined to force protection on the manufacturer.

There are other bits of evidence that seem to point to the fact that the protectionists were determined to add to the duties on silk. In the debates in the Senate a number of speakers seemed to be surprised that so radical a

[8] *Tariff Hearings*, 1896-7, Vol. 2, p. 1737. Mr. William H. Chapman, President, Williston and Knight, Easthampton, Massachusetts.

change had been made in the silk schedule. Members from several states[9] arose and declared that they had understood that their constituents were satisfied with the old rate of 50 per cent and could not see any reason why a change should be made. Petitions even were submitted. One petitioner[10] said, "Our understanding is that the New Jersey manufacturers themselves suggested a straight 50 per cent ad valorem duty as being ample protection to them." The petitions presented by Jones of Arkansas, protesting that the House Committee on Ways and Means refused to hear those not desirous of higher rates, but "gave ear only to Connecticut and New England manufacturers" seems borne out by an examination of the tariff hearings of 1897. Aside from one Pennsylvania manufacturer of knit goods and laces, and two firms of New York importers, all the testimony presented is from Massachusetts and Connecticut manufacturers. The meaning of this discovery is clearer when one learns that the firmest and most combative advocate of high protection, the man who supported the new schedule of duties through thick and thin, who met every argument presented in opposition to them, who left no stone unturned to discover virtues in the new scheme, was Senator Platt of Connecticut.

Out of all this evidence we may sum up: the party of protection was in power and was determined, almost compelled, to prove its power by producing a tariff of a protective nature. Add to these motives that arising from a deficit in the treasury and consequent need of an increase in the revenue, and it may easily be imagined that rates of duty were raised, in many cases, with little regard to

[9] McBride of New York, White of California, etc. Cf. *Cong. Record*, 1897, pp. 2007 ff.

[10] T. K. Stewart and Company of New York, *Ibid.*, p. 2009.

the needs of the protected industry, or even of the wishes of a majority of its representatives.

It is not necessary to follow in detail the silk schedule of the House bill. As we have seen, a specific system had long been contemplated and many had been drawn up. The House Committee, determined beforehand on a change from the ad valorem system, had no trouble in devising a specific schedule. This was put through the House without change or even serious opposition; and so it was sent on to the Senate.

In the upper house, however, there was interesting debate and more or less opposition. The rate on velvets had been $1.50 a pound in the Act of 1894. This had now been increased in the House by adding 15 per cent ad valorem to the specific duty. This addition was allowed by the Senate to continue without comment. It will be remembered that there was some prospect that velvets could be made in this country, while American plushes were felt to be almost hopeless. Hence the plush duty was only $1.00 a pound. The Senate probably felt that the 15 per cent would not make much difference, might give the velvet manufacturers a little of the assistance of which they stood in need, and could be safely conceded anyway for the sake of revenue. With plushes, however, it was different. The rate had been changed by the House from a straight $1.00 a pound to a mixed duty of $1.25 a pound, plus 15 per cent ad valorem. There was certainly less reason to increase the rate materially on plushes than on velvets, unless it were intended to bolster up an unprofitable industry at any cost. After some debate on the subject, the rate was lowered to $1.00 per pound plus 15 per cent, simply adding 15 per cent to the rate of 1894, as had been done in the case of velvets.

It was when dress and piece goods came up that the

items of the House bill met serious opposition. Jones of Arkansas and several other senators arose and protested their surprise that the silk schedule had been so changed. They had understood that the silk manufacturers were satisfied with things as they were and had expressed themselves as content to have the old rates simply continued. Complaints were heard on all sides on various features of the new schedule, and serious flaws in it were exposed. The principle on which it was based was denounced as unjust. The assertion of its advocates that the new schedule did not increase the amount of duty, but simply aimed at preventing fraud by requiring payment on a specific basis, was scoffed at as mere pretense. The last assertion is easily proved to be true. Not only do the new rates average much above 50 per cent reckoned on an ad valorem basis, and rise in many instances to 100 per cent and more, but the obvious intention of the framers of the act, to put the rates above the old ones, is shown by the clause, "the amount of duty in no case to fall below 50 per cent ad valorem," attached to all the specific rates. All goods were to pay at least 50 per cent and as much more as the specific rate might bring it up to. In the course of the debate in the Senate in 1897, the advocates of the bill dropped their contention that the specific scheme contemplated only 50 per cent ad valorem levied on a specific basis, and contended merely that none of the duties ran over 75 or 80 per cent, keeping a discreet silence as to what they thought the average would be.[11]

Many senators pointed out the inherent injustice of the principle on which the new schedule was founded. All silk piece goods imported were to pay duty by the

[11] Cf. speeches of Mr. Platt of Connecticut. *Cong. Record,* 1897, pp. 2007-11.

pound, regardless of the quality of the silk or the fineness of the workmanship. Obviously, on this scheme, goods of poorer quality would pay a much higher proportional rate than the better grades. Two pieces of the same weight per yard could easily vary in quality so much that one could be worth many times the other, yet both would pay the same duty, making the amount paid on one piece come to 50 or 60 per cent, while the other, if it came in at all, would have to pay 500 per cent on its value as a duty. In fact, the scheme excluded cheaper grades of goods altogether and put a high rate on articles of medium quality, while the most expensive silks escaped with a comparatively moderate duty. The new tariffs thus put the heavier burden of taxation on those who could not afford the more expensive articles from abroad. The minimum principle, introducing graduations by value, was felt, with all its faults, to be more just in incidence.

It was a particular example of what could happen under the new tariff act that brought on the warmest opposition the bill had met, and caused even the staunchest Republican to pause in his allegiance. Senator Jones of Arkansas led the chorus of protest against the excessive rate on cheaper goods. There are certain kinds of Chinese, Japanese, and Indian cloths made from the cocoon of a silkworm that grows wild. The threads are of inferior quality and are not strong enough to be woven on a power loom. They are woven by hand and made into cheap waists and workingmen's blouses. These fabrics are very light, and as the raw silk costs only the labor of picking it off the bushes, are sold very cheap, as low as 8 cents per yard.[12] *Tussore* and *chappe* silks are examples. They did not really compete with the reeled silk products, but many spun silk manufacturers feared

[12] *Cong. Record*, 1897, p. 2009.

that they would prove dangerous. Senator Jones brought in a sample of goods of this kind. It weighed 4 ounces to the yard, the duty on which as provided in the bill, and as finally enacted, was $2.50 a pound. He presented the following table:

| Cost | Weight per yd. | Duty | Ad Valorem |
|---|---|---|---|
| 8c | 4 oz. | .62 ½c | 770% |

He protested against 770 per cent. He also brought in many other samples of light weight but cheap silk goods, such as Chinese pongees, and shantung pongees made from the wild silk of India; all of these bore duties from 75 to 700 per cent. Eighteen inch piece-dyed pongees, paying $3.00 a pound and weighing less than 1⅓ ounces per yard, stood thus:

| Cost | Weight | Duty per yd. | Ad Valorem |
|---|---|---|---|
| 17c | 1.2 oz. | 22.5c | 132% |

Duties much higher than this have subsequently been paid under the operation of the act, hence this example is far from being an exaggeration.[13]

[13] The following petition was sent to one of the senators from New York (McBride), and read in the Senate by Jones of Arkansas:

"The undersigned, importers of silks, doing business in New York, desire to invite your attention to the rates provided in the pending tariff to be imposed on silk goods. Schedule L, as it came from the House imposes duties on many grades of silks imported by us that would be positively prohibitive and would practically destroy our business. We refer to Japanese silk, and goods made chiefly of spun silk, known as chappe, made in France and Switzerland. At the same time European dress silks of the finer grades are to be admitted at reasonable rates, so that they can still be imported.

"We have made full representations to the members of the committee having the silk schedule in charge as to these inequalities, and we have made verbal statements to such members, who appeared convinced thereby, but we fear these facts have been *overruled before the full committee owing to the strong influence of a certain Connecticut manufacturer.*

Senator Jones, therefore, offered an amendment, retaining the specific schedule, but making for lower rates on cheaper grades of goods. He also suggested that no silks should pay over 60 per cent ad valorem, which alone put the limit 10 per cent higher than the previous rates. It contained a tacit protest against rates aiming at a general increase of duty.

At this formidable exhibition many professed protectionists showed signs of wavering. Mr. Teller of Colorado announced that he "believed in giving liberal support to home industries as strongly as any man," but he had no hesitation in saying that no 700 per cent duty would receive his vote. Senators Gray and Mantle spoke in the same strain, adding that if the schedule went through as it was, they should vote for the amendment of Mr. Jones, prohibiting a duty amounting to more than 60 per cent.

Mr. White of California declared: "I do not think the Connecticut manufacturer (a manufacturer of spun

"We now appeal to you to use your influence with the committee to stay this impending injury to the commerce of New York and to us, your constituents. There is no question as to the facts. The specific rates provided in the bill are equivalent to 90 to 100% ad valorem on Japanese silks and 110 to 150% on chappe silks. On some of the cheaper grades of Chinese pongees the duty will be more than 700%. At the same time the rates on European dress goods, such as are used by persons of wealth, run from 40 to 70%, the lower rate applying to the most costly goods. These, however, must pay 50% ad valorem if the specific rate falls below that rate.

"We indignantly protest against such an outrage, and we ask you to interpose and demand equality and uniformity of treatment by the committee, of all grades of silk goods imported. We have no objection to specific rates. We prefer them if they be fairly and equitably arranged. But this bill exhibits such glaring favoritism to the great Connecticut manufacturer, proposing as it does to crush out all foreign competition for his benefit, that we confidently appeal to you," etc.

silks at South Manchester), who is worth seven or eight millions made in legitimate business under our favoring laws, is suffering at 45 per cent ad valorem. I do not suppose the Senator from Connecticut will say there is any general demand among the silk manufacturers of this country for anything more than a 50 per cent rate. Indeed, I was told day before yesterday by a silk manufacturer that the vast majority—I think he said 90 per cent—of those engaged in the business at Paterson, *had agreed on a 50 per cent rate.*"[14]

Senator Mantle said: "Don't impose 700 per cent duty: 700 per cent is prohibitory, and if we intend to stop Japanese cheap silks from coming in, why not be manly and prohibit them outright?"

Against all this opposition and counter-argument Senator Platt tried to make headway. He started in by saying that he believed no rate on the schedule went above 75 or 80 per cent. In fact, he had seen a report of the appraiser of New York in which it was stated that no rate on the new schedule went over 80 per cent. As to the 770 per cent pongee shantung, however, he was obliged to admit that he did not know about it. However, he recovered himself in a moment and started to show that it was only Chinese silk after all; poor stuff, made by the cheapest labor in the world; the American workingman must be shielded from any possibility of competition from this low grade coolie labor; his standard

[14] There were a large number of petitions of the same general tone. One letter to Senator McBride was read in Senate by Mr. White:

"Our understanding is that the New Jersey silk manufacturers suggested a straight 50% ad valorem as being ample protection to them . . . . unscrupulous parties have taken advantage of the general unintelligibility of specific rates to introduce prohibitory duties."

(Signed) "T. K. Stewart & Co."

of living, and so on. This well-known line of reasoning was interrupted by Mr. Teller, who said bluntly that he did not "care whose silk it was, no 700 per cent duty got his vote." Mr. Platt therefore dropped the "cheap labor" argument and fell back on his original assertion that none of the rates went above 75 per cent—certainly none above 80 per cent. Hereupon Mr. Mills observed that if Mr. Platt claims there is no rate above 75 per cent, "we'll test his faith in his own statements by an amendment that no duty be over 60 or 75 per cent."

Mr. Jones's original amendment, that no rate be over 60 per cent, was now voted upon. As the event showed, Senator Platt need not have worried. He had an argument more powerful than all others in his favor, a party discipline too strong to be seriously shaken. Jones's amendment was lost, and even the later amendment, that no duty be over 75, then 100, then 200 per cent, were lost in succession.[15]

[15] The full history of the fight is interesting. On Jones' 60% amendment the votes stood:

| Yeas | Nays | Not Voting |
|---|---|---|
| 23 | 26 | 40 |

Mr. White next moved that no rate should be over 75%, and he urged that the Senate owed it to themselves to prove their faith in their own statements by voting for his amendment. The Senate did not see it that way, however, and the votes stood 22 for, 24 against, and 43 not voting.

Mr. White then moved that no rate should be over 100%. He also urged that we should not risk our vast exports to Japan by an excessive rate on a few million dollars worth of Japanese silks, which we have no object in keeping out anyway. The party stuck stolidly to its post, and the result showed: yeas 25, nays 28, 36 not voting.

Mr. White kept doggedly at it. He now moved that no rate be over 200%. The Republicans, at this persistent hammering at their compact ranks, rose up in arms. Mr. Platt said he objected on principle to inserting a "not more than" clause. It would cause endless complications and embarrasments. It would serve as a precedent for inserting a maximum schedule of duties, which a

That was the end of serious opposition to the new silk schedule. A few minor changes were made, some slightly increasing the House rates, and some lowering them; the only alteration worth noting was a reduction of the piece goods rate from $5.00 a pound for goods weighing less than 1⅓ ounces per yard to $4.50 per pound.

## II. RESULTS OF THE SILK RATES IN THE TARIFF OF 1897.

At this point it might be well to glance at the general effect of the tariff of 1897 as revealed in the course of subsequent importations. The true importance of the bare figures is much more difficult to judge accurately than would seem at first glance. The year 1897 registered a turning point in the industrial history of the country. The previous four years had beeen marked by general economic depression and hard times. The end of this period saw enormous crops in this country sold at high prices in Europe. Simultaneously, combination and technical advancement in many of our most important industries resulted in the most prolonged period of pros-

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subsequent free trade Congress could lower to suit. A very acrimonious debate followed. The opposition urged that a maximum limit was needed here to prevent a 700% rate. Mr. White showed that it would not establish a precedent, because p. 250 of the Act of 1894 reads: "In no case shall the duty exceed 8 cents per yard." But the opposition were fighting under insuperable difficulties. Mr. Morgan tried in vain to secure recognition from the chair, in order to make a speech in favor of the amendment. Mr. Platt called for the roll and it had already begun before Mr. Morgan finally got the ear of the speaker by shouting so loudly as to interrupt proceedings. He made a lengthy speech, summarizing all that had been said and emphasizing the question of Japanese trade. The Republicans, angry at the interruption rather than convinced by the argument, stood even more firmly than before—yeas 23, nays 28, not voting 38.

perity and high money incomes that this country has ever seen. As we have already noted, when people are prosperous the consumption of silk goods increases. And there is a superabundance of evidence that the consumption of silk goods increased at an unprecedented rate after 1897. Take the home of manufactures,—the production in 1890 was $87,000,000. From 1890 to 1897 the amount turned out increased but little, as the imports of raw silk in 1897 were about the same in quantity as in 1890, some five or six million pounds. The home production in 1897 could not have been much over $87,000,000, especially since the fall in prices had been considerable. Yet in 1900 it stood at $107,000,000, while the imports of raw silk for use in American mills increased to over 13,087,000 pounds ($45,000,000). By 1905 raw silk imports had increased to 19,000,000 pounds ($60,000,000) and the finished product stood at $132,000,000 (less duplications, $118,500,000), an increase of $20,000,000 in only five years.[1] All these figures represent an absolute increase in the home consumption of silks, for the imports from abroad have not decreased since 1897, nor has any appreciable amount of the American product been exported. Neither is the increase due to a rise in prices, for all silks, especially the domestic goods, have fallen in price since 1897.[2] The fact remains that the enormous advance in the consumption of silk goods has been due to the ability of the consumers to spend more money on such goods.

In view of this state of affairs, one would hardly expect the importations to fall off short of an almost absolute prohibition. As a matter of fact, there has been an

[1] U. S. Census *Bull.* No. 74, pp. 173-5.

[2] Census *Bull.* No. 74, p. 178; also *Twenty-ninth Ann. Rept. Silk Assn.*, p. 72. Cf. pp. 179-80, "Manufactures" in Bulletin.

increase in the total values of incoming silk fabrics since 1897. The figures since 1890 run:

TOTAL IMPORTS OF SILK MANUFACTURERS
(In millions of dollars)

| Year | Value | Year | Value |
|---|---|---|---|
| 1890 | 38.7 | 1900 | 30.9 |
| 1891 | 37.9 | 1901 | 26.8 |
| 1892 | 31.2 | 1902 | 32.6 |
| 1893 | 39 | 1903 | 36 |
| 1894 | 24.8 | 1904 | 32 |
| 1895 | 31.2 | 1905 | 33 |
| 1896 | 26.6 | 1906 | 30 |
| 1897 | 25.2 | 1907 | 38 |
| 1898 | 23.5 | 1908 | 33 |
| 1899 | 25.1 | 1909 | 30 |

There has been an increase, but far from a relative increase. The highest figures since 1897 do not stand as high as those for 1890 and 1891, though there is every reason, aside from tariff considerations, why they should stand much higher. There is every reason to believe, therefore, that the specific features of the silk schedule in the tariff of 1897 have shut out a large quantity of goods that would have been imported had the old plan been continued. The cheaper handmade products have been excluded entirely by the specific schedule. Our conclusions in regard to dress and piece goods are well borne out when we glance at the figures for handkerchiefs, laces, ribbons, knit goods, or pile fabrics. Handkerchiefs bear the same system of specific duties as dress goods, except that they come in under a minimum ad valorem duty of 50 and 60 per cent. They average about 64 per cent. Laces and knit goods pay 60 per cent, a straight ad valorem rate. Ribbons pay 50 per cent, due to the fact that our ribbon industry is not so much in need of protection as the broad goods. Pile fabrics pay the old duty with 15 per cent added. On all these fabrics, with their higher rate of duty, im-

portations have perceptibly increased, showing that the larger demand for silk goods in the past ten years has led to larger consumption at prices made higher by the new tariff.

IMPORTS OF SILK GOODS
(In millions of dollars)

| | Dress and Piece Goods | Laces | Ribbons | Velvets and Plushes |
|---|---|---|---|---|
| 1898 | 10.5 | 3.3 | 2.0 | 1.5 |
| 1899 | 13.1 | 2.8 | 1.7 | 1.5 |
| 1900 | 15.4 | 3.2 | 1.8 | 2.3 |
| 1901 | 11.9 | 3.2 | 1.8 | 3.3 |
| 1902 | 13.6 | 4.5 | 2.8 | 3.0 |
| 1903 | 14.0 | 5.0 | 4.3 | 3.0 |
| 1904 | 14.2 | 4.8 | 1.9 | 3.0 |
| 1905 | 15.1 | 4.7 | 1.9 | 3.2 |
| 1906 | 14.8 | 4.6 | 2.0 | 3.0 |
| 1907 | 13.5 | 7.0 | 1.8 | 2.7 |
| 1908 | 10.1 | 5.9 | 1.3 | 1.9 |
| 1909 | 11.2 | 5.6 | 1.6 | 1.4 |

If we glance at the specific rates now actually applying on the various fabrics, and the amounts of each kind that are imported, we meet with striking results. Unfortunately, the various rates are so complicated as to be almost unintelligible to one not thoroughly acquainted with the thousand and one different varieties of silk cloth. We cannot follow out each rate in detail, but must be content to indicate the more marked results of the new system of duties.

First of all, it should be noted that the basis of all the schedules is payment of duty by weight. Cloth weighing so much per square yard, regardless of the quality of the material or the fineness of the workmanship, pays a fixed rate of duty. Thus at once the cheaper grades of goods are excluded, or come in at a heavy disadvantage; they must pay the same duty as the costlier silks of the same weight per yard, hence a greater pro-

portion of their money value must be turned in to the customs officials. This line of reasoning is borne out by the facts: recent importations have tended more and more to run to costlier and finer silks, heavy chasubles, and draperies of exquisite workmanship. The dress goods that used to come in plain are now heavily figured and ornate with designs and elaborate patterns.[3] Moreover, the uneven working of the Dingley tariff is seen in the way the duties paid look when put on an ad valorem basis. Every year millions of dollars worth of these expensive silks came in under the heading "on which specific duty does not amount to 50 per cent", their value being so great that they paid the minimum rate. On other goods the widest varieties of ad valorem duties prevail, showing the uneven working of the specific scheme. A few examples taken at random from the importations for 1899, a normal year, will show this.[4]

| | Duty | Value per unit | ad valorem equivalent |
|---|---|---|---|
| 1. Dress goods, wt. 1⅓ to 8 oz., containing more than 45% in weight of silk.............. | $2.50 lb. | $3.17 lb. | 78.75% |
| 2. Dress goods, wt. under ⅓ oz. per yd................. | 4.50 | 8.39 | 53.59 |
| 3. Dress goods, dyed, wt. ⅓ to 1⅓ oz. per yd............... | 3.00 | 3.38 | 88.83 |
| 4. Handkerchiefs, dyed, wt. ⅓ to 1⅓ oz. per yd............ | 3.25 | 2.96 | 109.69 |
| 5. Hdkfs., hemstitched, wt. 1⅓ to 8 oz., containing more than 45% silk.................... | 2.50+10% | 2.20 | 84.72 |
| 6. Hdkfs., hemstitched, 1⅓ to 8 oz. wt.................... | 2.25+10% | 1.56 | 154.23 |
| 7. Dress goods on which duty is less than 50%........... | | | 50. |

To show the amounts imported under these various

[3] Allen, *Silk Ind. of World*, p. 28.

[4] *Rept. Com. and Nav.*, 1899.

rates, we subjoin the following table, taken from the returns for the same year.

| | Duty | Value per unit | ad valorem equivalent | amount imported, 1899 |
|---|---|---|---|---|
| 1. | $2.50 | $3.17 lb. | 75.78% | $27,797 |
| 2. | 4.50 | 8.39 | 53.59% | 106,329 |
| 3. | 3.00 | 3.38 | 88.83% | 3,134 |
| 4. | 3.25 | 2.96 | 109.69% | 975 |
| 5. | 2.50+10% | 3.35 | 84.72% | 445 |
| 6. | 2.25+10% | 1.56 | 154.23% | 78 |
| 7. | 50% | —— | 50% | $4,000,000 (½ year) |

And so on, the figures in some cases running as high as 187 per cent ad valorem.[5]

It will be noted from the second table that the *higher* the amount of duty the *smaller* the figure for importations, a state of affairs that explains itself. There are, however, two points of interest to be noted in this connection. The first is as to the amount of goods excluded by the specific rates. At 180 per cent few goods can be imported at all, and the presumption is that if a few pieces do still come in at such a rate, the importations of goods of that description would be much larger at a normal rate of duty. Moreover, the imagination only could estimate the quantity of goods that if imported would have to pay over 180 per cent, but are absolutely excluded by the incapacity of the specific schedule to make a fair rate of duty for such articles. The second point to be noted is as to the value per piece of the different fabrics imported. This subject is too intricate to be gone into deeply, but a study of the figures reveals that as a general rule *the goods paying the highest proportion of duties are of the smallest value per piece.* The

[5] Probably the highest rate of duty paid was in 1905, on an importation of silks of the value of $71, which paid $157 of duty, making 221% ad valorem. *Rept. Com. and Nav.*, 1905, p. 974.

article paying 53.59 per cent of duty averaged $8.39 per unit of quantity; that paying 78.75 per cent was worth only $3.17 a pound; the article paying 109 per cent was worth $2.96 per pound; while that paying 150 per cent was worth only $1.56 a pound. On still cheaper fabrics the rate would run, as we have seen, 200 to 700 per cent; but these are not, cannot be, in fact, imported.

This enormous inequality in the rates payable on different fabrics under the Tariff Act of 1897 could be due only to the difficulty of specific description. With all its carefully worked out minuteness of detail, the official rate could not describe the goods and grade the duty thereon in such a manner that all would pay approximately the same duty. In so far as the specific schedule was designed to do away with the inequalities that existed under the previous ad valorem system, it could hardly be considered successful.

There is still another reason for considering the new specific schedule a failure. After each clause in the paragraph dealing with dress and piece goods there is the proviso that in no case shall the duty be less than 50 per cent. This was to prevent goods of finer quality from coming in too cheaply, and was intended as an exception to the general rule. The exception in this case proved the rule. Most of the dress and piece goods since imported have come in as "others on which the specific duty does not amount to 50 per cent." In the year 1899, for example, the total value of dress and piece goods imported amounted to $13,048,000.[6] *Those paying 50 per cent amounted to* $7,785,000, *more than half.* In the following year (1900) the fabrics paying specific duties amounted to only $4,300,000, while those paying the

[6] *Rept. Com. and Nav.*, 1899, p. 337.

minimum of 50 per cent came to $10,600,000. The proportion since then has been about half and half.

IMPORTATION OF DRESS GOODS.
(in millions of dollars.)

| | 1900 | 1901 | 1902 | 1903 | 1904 | 1905 | 1906 | 1907 | 1908 | 1909 |
|---|---|---|---|---|---|---|---|---|---|---|
| Paying specific duties ............ | 4.3 | 5.3 | 5.9 | 7.4 | 7.1 | 8.3 | 7.5 | 4.9 | 3.0 | 5.5 |
| Paying 50% ad valorem .......... | 10.6 | 6.7 | 7.1 | 6.9 | 6.8 | 6.3 | 6.1 | 8.5 | 7.1 | 5.6 |

These are the articles of finest quality, expensive goods that can be afforded only by the upper classes. How about the less expensive silks? They come in under a specific duty amounting to from 54 to 700 per cent, or are excluded altogether. As a schedule designed to do away with the faults of undervaluation that adhered to the old plan, the revised specific plan was a failure. About one half the dress goods since imported have come in under the 50 per cent ad valorem clause. The result has been to put a higher rate on the poorer classes of silks, with mystifying variations in the duties on the better grades. We shall see later what bearing it has had on the American industry.

12. THE TARIFF ACT OF 1909.

When the hearings on the tariff began in 1908-9, the Silk Association of America, representing in the main the interests of manufacturers, through its Committee on Revenue Laws,[1] prepared an entirely new schedule of duties embracing a wide extension of the specific system. Immediately upon the promulgation of this schedule the House Committee was beseiged with criticism concerning it of the most contradictory character. The pro-

[1] The committee was composed of Messrs. F. W. Cheney, Chairman; Jacques Huber; Jos. W. Congdon; Otto Andreae, Jr.; and Charles F. Houser.

posed rates were thought by some to be too low,[2] while others protested that they were too high.[3] Consequently the House Committee followed the eminently safe plan of recommending no change at all. The old rates of the Dingley Act were accepted and passed by the lower house without debate.

Although the Finance Committee of the Senate held no public hearings, private conference resulted in the restoration, with a few technical changes, of the new specific schedule prepared by the Silk Association. In spite of the obvious increases in the rates as thus reported, the silk schedule was allowed to pass the Senate without debate, and, with a few minor reductions in the Conference Committee,[4] became enacted into law. The absence of debate on so important a subject has a natural explanation. Increases in the duties on silks are not, in general, as bitterly contested as on other articles. Silk goods are considered by the public at large as a luxury, entitled to rank almost with wines and tobacco, on which an increase in taxation is regarded with more or less complacency. Since those in favor of lower rates cannot hope for a victory on more than a part of the items considered, they are inclined to save their ammunition for use in fighting for reduction on articles more commonly regarded as among the necessities of life.

The salient characteristic of the new schedule is a wholesale application of the specific system, not only in substitution for previous ad valorem duties, but also in a stricter classification for fabrics that before had only

[2] *New York Journal of Commerce*, February 27, 1909: letter of the Champlain Silk Company.

[3] U. S. *Tariff Hearings*, 1908-9, *First Print* No. 53, pp. 8083-5, and 8089-92.

[4] U. S. *House of Representatives*, 61st Congress, 1st session, Report No. 20, pp. 26-7. The reductions were mainly due to the interposition of President Taft at this time.

loosely fallen within that system. Whatever the differences of opinion between manufacturers and importers as to the precise amount of duty that should be levied, it must be admitted that both sides were at last agreed as to the desirability of specific rates, both on the ground of administrative advantage and in the interest of trade stability. The French Chamber of Commerce of New York, a body of silk importers, in a letter dated January 27, 1909, to the Committee on Ways and Means,[5] admitted that the ad valorem system gives rise to strife and bickerings which embitter all parties concerned, and in addition causes a mischievous uncertainty in market prices. Most of the importers who protested that the schedule of rates of the Silk Association were too high still declared themselves in favor of the specific system,[6] while efforts truly heroic were made by manufacturers of knit goods, laces, and embroideries to devise a specific system that would take these products out of the ad valorem group.[7]

The first change of importance in the new schedule relates to spun silk. In the previous law a minimum system had applied: spun silk worth less than $1.00 a pound paid 20 cents a pound plus 15 per cent; it now pays 35 cents a pound. On spun silk worth more than $1.00 a pound, the new schedule enacts an elaborate series of rates according as the yarn is in singles, tram, or organzine; according as it is dyed, colored, or bleached; and varying by a differential based on thread numbers. Spun silk in the form of singles, up to number 205, pays 45 cents a pound plus 1-10 of 1 cent per number per pound; above number 205 the duty is 45 cents a pound plus 15-100 of 1 cent per number per pound. The old rates

[5] U. S. *Tariff Hearings*, 1908-9, *First Print* No. 53, p. 8090.
[6] *Ibid., First Print* No. 53, p. 8086, and No. 41, pp. 6283ff.
[7] *Ibid, First Print* No. 23, pp. 3005-10, and No. 35, p. 5150.

had amounted to about 37 per cent ad valorem. In an estimate prepared by the Bureau of Statistics the new rates on spun silk were expected to average 50 per cent on the basis of past imports.[8] There is no doubt that we have here a considerable increase in the protection granted to Connecticut producers of spun silks; and it is significant that the chief manufacturer of these fabrics was the chairman of the Revenue Laws Committee which prepared the schedule.[9]

Both on thrown silk and sewing silk there are changes from the previous 30 per cent ad valorem to a specific duty. Sewing silk now pays $1.00 a pound in the gum and $1.50 a pound if ungummed; estimated to be equivalent to 58 per cent on the basis of past imports. As these products have been exported in increasing quantities during recent years, it is difficult to see a ground for raising the duties, nor is there likely to be any considerable effect.

The former flat rates per pound on pile fabrics have given way to a closer and more comprehensive specification. Velvets had paid $1.50 a pound plus 15 per cent. The 15 per cent is taken off for velvets weighing over 5¾ ounces per square yard, a slight reduction. For lighter weights, however, the duties now run up to $4.00 a pound. Similarly, plushes weighing over 9½ ounces per yard are reduced from $1.00 a pound plus 15 per cent to a flat $1.00 a pound, but lighter weights now pay $2.40 a pound. There is here a slight reduction for some grades and a considerable increase for others. The nature of the new arrangement will be discussed in connection with the changes in the piece goods items.

[8] U. S. *Senate Document* No. 128, p. 60, 61st Congress, 1st session.

[9] See U. S. *Tariff Hearings, First Print* No. 41, p. 7025, where the Cheney Brothers Company wrote that they had been unable to work out a specific rate on spun silks and advised the retention of the old duties. Evidently better success attended their later efforts in this direction.

"Woven fabrics in the piece" are subject to an entire re-classification in the new schedule. It is obviously intended to increase largely the number of classes and narrow down the specifications for each one in such a manner that a separate description and a separate rate of duty shall be provided for the larger part of the great variety of imported piece goods. For example, in 1897 there had been a single class for goods weighing from ⅓ ounce to 1⅓ ounces per yard. In 1909 separate classes are made for fabrics weighing from ⅓ to ⅔ of an ounce, ⅔ to 1 ounce, and 1 to 1⅓ ounces. Similarly on cheaper goods, more classes are made in the divisions, according to percentage of silk content. It is extremely difficult to compare the old rates and the new; where this is possible it appears that while some duties have been raised and others lowered, in many instances the complexities of the system screen a material increase.[10] On cheaper goods and on the medium grades the increases are pretty general, as appears in the table given in the footnote. On the other hand a number of reductions will be noted, always applying on more expensive fabrics. On goods weighing less than ⅓ ounce per yard the rate is lowered from $4.50 to $4.00 a pound. On goods weighing from 2½ to 8 ounces and containing over 50 per cent of silk the rate in the gum is reduced from $2.50 to $2.25 a pound, and when ungummed, dyed, or printed, from $3.00 to $2.75 a pound.

[10] The following comparison, showing the rates on cheaper goods, is fairly typical:

| 1897 Weighing 1⅓ to 8 oz. per yd. | In Gum. | Gummed. | 1907 Weighing 2½ to 8 oz. per yd. | In Gum. | Gummed. |
|---|---|---|---|---|---|
| Under 20% silk | $ .50 lb. | $ .60 lb. | Under 20% silk | $ .57½ lb. | $ .70 lb. |
| 20 to 30% " | .65 " | .80 " | 20 to 30% " | .75 " | .90 " |
| 30 to 45% " | .90 " | 1.10 " | 30 to 40% " | .90 " | 1.10 " |
| Over 45% " | 2.50 " | 3.00 " | 40 to 50% " | 1.10 " | 1.30 " |
| | | | Over 50% " | 2.25 " | 2.75 " |

The most striking reduction, one that applies both to pile fabrics and to piece goods, is the lowering of the *minimum* clause from 50 per cent to 45 per cent. It seems clear that the aim of the new classification is to strengthen the grip of the specific system; to enlarge it so as to take in many of the fabrics which under the old law entered at the 50 per cent minimum, both of pile fabrics and dress goods. This object is secured largely by the upward movement in the specific rates, which, though difficult to analyze, is generally held to be considerable.[11] Tending in the same direction is the lowering of the minimum rate. Only when the specific rate does not amount to 45 per cent will fabrics be admitted on an ad valorem basis. Evidently the silk manufacturers do not intend that from 50 to 75 per cent of imported pile fabrics and piece goods shall enter on the ad valorem system in the future.

Handkerchiefs furnish the one striking instance in the new schedule of the specific system abandoned as a failure. Handkerchiefs had borne the same specific rates as piece goods in the previous act. These are now changed to a flat 50 per cent ad valorem for plain, and 60 per cent for hemstitched or embroidered pieces, the minimum rates of the previous act. The reason is of course that under the specific system nearly all imported handkerchiefs came in under the minimum clause, the proportion rising as high as 90 per cent in some years.[12] In this item we see a slight concession in favor of lower rates.

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[11] U. S. *Senate Document*, 61st Congress, 1st Session, No. 77, pp. 60-62; also *Senate Doc.* No. 128, pp. 63-6.

[12] Importations of Handkerchiefs.

| | 1907 | 1908 | 1909 |
|---|---|---|---|
| Specific duty.................... | $41,500 | $38,600 | $123,900 |
| Minimum clause............... | 356,000 | 264,400 | 236,800 |

Practically unchanged are the rates on ribbons, braids, embroideries, knit goods, and laces, which are left as before at 50 and 60 per cent ad valorem. The Lace and Embroidery Manufacturers' Association of New York attempted to work out a specific schedule on laces, and urged a "duty of 1/5 of 1 cent a yard for each 100 stitches, plus 60 per cent,"[13] but for the most part it was admitted that a specific rate, while desirable, was impracticable.[14]

Distinctly unique is the insertion of paragraph 405, dealing with artificial silk.[15] The duty is: singles, 45 cents a pound; tram, 50 cents a pound; organzine, 60 cents a pound; but in no case is the rate to be less than 30 per cent. Naturally the manufacturers of braids and embroideries using artificial silk came forward when this tax on their raw material was proposed and demanded a compensatory duty.[16] Hence we find introduced into the silk schedule for the first time the principle of compensation so familiar to those acquainted with the duties on woolen goods. On laces, braids, and embroideries made of artificial silk a specific duty of 45 cents a pound is granted by way of compensation for the duty on the raw material, and in addition 60 per cent ad valorem, representing protection. Imported fabrics made of artificial silk will thus bear a total duty amounting to 90 or 100 per cent.

The silk rates have been widely considered the most conspicuous example in the Act of 1909 of a general increase of duties applied over an entire schedule.[17] The increase in many of the items is only too obvious; and it

[13] U. S. *Tariff Hearings* 1908-9, *First Print* No. 35, p. 5150.

[14] *Ibid.*, p. 5153.

[15] This article is described in Part V.

[16] U. S. *Tariff Hearings*, 1908-9, *First Print* No. 23, pp. 3018ff.; No. 35, p. 5147.

[17] *Quarterly Journal of Economics*, November, 1909, p. 28; *Journal of Political Economy*, Vol. 17, pp. 603ff.

cannot be denied that the extension of the specific system was made the pretext for substantial increases in the effective duties. It must be granted, however, that the framers of the schedule seemed to have had in mind some line of demarcation between fabrics which cannot be made in this country, and those which can be made here and which suffer more or less from competition with similar foreign products. Closely scanned, the increases in the silk rates will be found to apply mainly to articles of the latter class. These are fabrics of medium grade on which the specific duties in both the piece goods and pile fabric items have been advanced. The object has been to increase the amount of protection in the direction that would be most welcome to domestic producers.[18]

The reductions in the present law will be found to apply in the main to non-competitive articles of the very expensive variety. It has been explained that fabrics which come in under the minimum clause are objects of such high worth that the specific rate amounts to only a small proportion of their value. The lowering of the minimum to 45 per cent will reduce to some small extent the price of these fabrics to the consumer. The recession in the specific rates on certain high grade piece goods bears toward the same end. The duties on handkerchiefs are lower. It is unfortunate that no corresponding provision was made for the admission of non-competitive fabrics of the very cheap variety, the exclusion of which under the specific system works a real hardship. On the whole it may be said that the silk schedule in the Act of 1909 emphasizes the principle of protection in a material increase of duties on all classes of goods which compete with domestic silk manufacturers; revision downward has been applied only to a few expensive fabrics of European make that have no counterpart among the products of American looms.

[18] *Thirty-eighth Ann. Rept. Silk Assn.*, p. 22.

# PART V

## RECENT CHANGES AND PRESENT STATUS: AS REGARDS PROTECTION.

### 13. AMERICANIZATION OF THE INDUSTRY AND DEPENDENCE ON PROTECTION: SILK THROWING AND THREAD MANUFACTURE.

A rapid glance over the history of the silk industry in this country will show that it is divided into two clearly marked periods. The first, extending from the Civil War to about the year 1890, presents no problems different from those of a rapidly growing protected industry, following closely the example and pattern of the older European establishments, and entirely dependent on tariff protection. The characteristics of this earlier period, in so far as they bear upon the purpose of the present investigation, have been sufficiently indicated in previous chapters. The evolutionary changes of the last score of years, however, present features that deserve close scrutiny. The industry begins to divorce itself from European example and precedent, branching out into directions typically American. The question is squarely presented, therefore, as to the extent to which the industry of today is capable of holding its own unaided against foreign competition.

The change in the character of the silk industry that had its first impetus about 1888-90 was not due to accidental causes. It has already been noted that the arrival of better raw material in the late seventies brought a wider use of power looms and at the same time stimulated investigation and experiment in the improvement

of machinery. Our first power looms were naturally of foreign make. But it was soon recognized that they were unsuitable for conditions of silk weaving in America. They were slow moving, aiming to save raw silk at the expense of labor, whereas in this country labor costs more than silk. Improvements went on slowly at first, not only because of lack of experience, but also because new plants were going up so rapidly that to get any equipment at all it was necessary to import the looms. The change from the old to the new does not become noticeable till the late eighties.

The characteristics of the new period deserve notice. It is at this stage that our manufacturers branch out into new lines, turning to the production of goods not before attempted. Even more characteristic of the new period is the remarkable advance in invention and improvement. No longer, as of old, are the eyes of our silkmen turned to Europe for all that is thought worth while in machinery, patterns, fashions, new ideas. Our best looms are no longer imported from France, Germany and Switzerland; they are made at home, and begin to take on a distinct character of their own.[1] The new machinery is adapted to conditions of production in this country.[2] The idea running through it all is to save in the cost of hand labor, to make the operator more efficient, to increase the output per unit of labor. The new machines run much faster than the old, so that the number of yards turned out by each weaver is increased. Automatic devices are invented that perform operations which before required time, personal attention, and care on the part of the operative.[3]

[1] *Twenty-ninth Ann. Rept. Silk Assn.*, p. 50.

[2] Allen, *Silk Ind. of World*, p. 29.

[3] U S. Census 1890, *Manuf. Ind.*, pt. III, pp. 215-17, also *Twenty-ninth Ann. Rept. Silk Assn.*, pp. 47, 54, etc.

It shall be our task, therefore, to investigate carefully the conditions of production in all the important branches of the silk industry; to inquire how far invention and improvement have gone in each case, and what prospect there is for the future. The object held in mind throughout is to discover, if possible, in which branches of the industry invention and improvement have gone, or may yet go, so far that the increased efficiency of the labor employed in this country is sufficient to offset the higher wages paid here. In short, the aim is to find out what kinds of silk fabrics are or may be made as cheaply here as abroad, what branches of the silk industry are or may be independent of tariff protection from foreign competition.

The first branches of the silk industry that would naturally present themselves for consideration in this chapter are the raising of cocoons and the reeling of the raw silk, which have been discussed in the section on raw silk. We have seen already that silkworms are not, and cannot hope to be, raised in this country.

The raw silk as it comes to this country is first subjected to the process known as throwing, which is described in an earlier part.[4] From a description of the processes one would be led to think that the manufacture of tram and organzine differed very slightly from that of sewing silk. There are, in fact, many points of resemblance in the two processes. Sewing thread and thrown silk are both made directly from the raw silk in the gum, and both are formed by twisting two or more strands together. But there is a difference, both of kind and of degree. Throwing, much more complex than making sewing silk, consists in winding, cleaning, doubling, twisting, re-winding, and reeling the

[4] *Supra*, p. 14.

raw into more substantial yard. Thrown silk is looser and coarser as a rule than sewing silk. Tram, for instance, consists of two or more threads just sufficiently twisted together to hold perhaps one turn to the inch. Organzine is formed of two or more single threads, the single threads being each twisted one way and all the threads together twisted another way.[5]

For reasons chiefly connected with the greater complexity of the processes, the manufacture of thrown silks did not reach a high state of development until some time after sewing silks had completely captured the American market. Thrown silks were still imported in the late eighties. But the decade from 1880 to 1890 witnessed in this country such remarkable improvements and inventions to facilitate the throwing of silk that the importations soon ceased.[6] The improvements were in the direction of making the process more automatic, at the same time increasing the speed of the spindles. By 1890 the spindles were making 10,000 revolutions per minute, a speed double anything ever before attempted.[7] This is about the limit for speed, though in 1900 the average speed had slightly increased, the spindles making from 11,000 to 12,000 turns per minute.[8]

The new machines were not only faster; they were also more automatic in their operation and yielded better tram and organzine.[9] The result was to turn the machines over to women and children; the amount of skill and labor necessary to run the machines had almost reached a minimum, and there was no longer need for

[5] Allen *Silk Ind. of World*, p. 22.

[6] U. S. Census 1890, *Manuf. Ind.*, Pt. III, pp. 222, etc. The statement in the text is comparative; a small amount is still imported occasionally for special purposes.

[7] *Ibid.*, p. 222.

[8] U. S. Census 1900, Vol. IX, p. 208.

[9] *Ibid.*, p. 209.

highly paid labor.[10] This development in the throwing process explains the two remarkable changes in the silk industry from 1890 to 1900, already considered. The number of children employed had declined from 5566 in 1880 to 2866 in 1890. In the ten years following, this number had increased to 6413,[11] an evolution due almost entirely to the growth of the throwing industry. The second change is the spread of this industry to Pennsylvania. The development of the throwing branch formed the nucleus of the remarkable localization of the silk industry in that state.

From 1890 to 1900 there was a continuous advance in throwing machinery. In 1895 a combined spinner and doubler was invented, which lessened still more the proportion of labor cost in making tram and organzine. From 1895 to 1900 over 90,000 new spindles were put into operation[12] in the United States. The new style of machine has since been adopted by several foreign countries, and in the technical schools of England and Switzerland.[13] A double-deck machine, driven by an endless belt, has contributed greatly to economy of space, and resulted in putting a still larger number of spindles under the eye of one operator.[14] An effort to solve the problem of spinning, doubling, and twisting organzine all in one process has resulted in practical machines, but it is too early to say at present whether they will be widely adopted or not.

The throwing industry is now in a position independent of the tariff and impregnable from the assaults of foreign competition. Our factories, equipment, machinery, and

[10] U. S. Census 1890, *Manuf. Ind.*, Pt. III, p. 219.

[11] U. S. Census 1900, Vol. IX, pp. 210ff.

[12] *Ibid.*, p. 222.

[13] Allen, *Silk Ind. of World*, p. 27.

[14] U. S. Census 1900, Vol. IX, p. 223.

organizations are the best in the world. For a number of years all the improvements and inventions in throwing machinery have come from the United States. Our operatives, even the children, tend more spindles and turn out a greater product per unit of labor than the most skilled workmen of Europe.[15] The cost of production of thrown silks is lower in the United States than anywhere else in the world. The progress made in this direction is almost unparalleled. Most of the silkmen now living can remember the time when the cost of having a pound of raw silk thrown into organzine or tram was upwards of $4.50. The average cost is now from 60 to 75 cents per pound.[16] The tariff on thrown silks is a useless incumbrance—a paragraph on our statute books that is written in a dead language.

There is no feature in the conditions of silk manufacture that offers more encouragement that the American industry may some day be entirely self-supporting than the fact that we surpass all other nations in the preliminary processes of preparing the raw material for use in the loom. Raw silk is an article comprising such great value in so small a bulk that the cost of transporting it to this country is an insignificant item in its selling price here. In fact, European looms are large users of Chinese and Japanese yarns.[17] It is encouraging to note that whatever difference there may be in the cost of the raw silk owing to transportation charges is made up to our manufacturers of finished goods by the lessened

[15] U. S. Census, Vol. IX, pp. 223, 224.

[16] *Ibid.*, p. 218.

[17] *Fifth Fin. and Ec. Ann. of Japan*, p. 94. *Ibid.*, p. 54.

Raw Silk exported 1904, in yen.

| | |
|---|---|
| To France .......... | 17,090,337 yen |
| To Italy ............ | 10,639,185 " |
| To Great Britain .... | 227,096 " |
| To United States.... | 60,747,832 " |

cost in this country of preparing the raw material for use in the loom. The recent progress in the throwing industry has resulted in putting the American weaver of broad goods and ribbons at least on equal terms with his foreign rival as regards the cost of the raw material.

There is not much to add to what has already been said in regard to sewing silk and machine twist. Though the industry has been protected by a duty of only 30 per cent until very recently, the imports have been a negligible quantity for a number of years. The domestic production has shown few fluctuations; the amount has slowly increased to supply the demands of the home market.

U. S. PRODUCTION OF SEWING SILK AND TWIST.

| Year | Value |
|---|---|
| 1875 | $6,420,833[18] |
| 1880 | 6,783,855 |
| 1890 | 8,068,213 |
| 1900 | 10,246,000[19] |
| 1905 | 10,146,000 |

The simple processes of twisting several fibres together and then winding and spooling them readily lend themselves to the application of machinery. The product is uniform and any amount may be manufactured without "overworking" any one pattern. There is no definite limit to the number of threads that can be attended to by one person, so there is opportunity for the exercise of intelligence and skill as an offset to the higher wages paid in this country. Lastly, the threads used in the manufacture of sewing silk are stronger and more heavily twisted than those used in the making of broad goods, and the likelihood of breakage is materially reduced. The manufacture of sewing silk has long been almost automatic, the only labor required being that of keeping a supply of raw silk on the spools. Sewing

[18] Allen, *Silk Ind. of World,* p. 31.

[19] U. S. Census *Bull.* No. 74, p. 174.

silk is the only branch of the industry that came into existence without protective stimulus, and is practically the only silk product that is now exported to other countries.[20] The exports of silk manufactures are not classified, unfortunately, in the government reports. The following table shows our total exports of silks, and probably represents for the most part sewing thread and twist.

U. S. Exports of Silk Manufactures.[21]

| Year | Value | Year | Value |
|---|---|---|---|
| 1894 | $283,765 | 1902 | $301,758 |
| 1895 | 256,181 | 1903 | 412,415 |
| 1896 | 300,884 | 1904 | 466,519 |
| 1897 | 224,660 | 1905 | 620,572 |
| 1898 | 297,074 | 1906 | 595,124 |
| 1899 | 290,729 | 1907 | 670,189 |
| 1900 | 252,608 | 1908 | 720,368 |
| 1901 | 244,678 | 1909 | 847,894 |

There is not the slightest doubt that the manufacture is entirely independent of tariff protection, and would be unaffected by the abolition of the present duty. The rate now standing on our statute book is a dead letter; it is of no consequence to the industry, and brings no revenue to the government.[22]

14. DEPENDENCE ON PROTECTION: COMPARISON OF AMERICAN AND EUROPEAN METHODS OF PRODUCTION.

Before passing on to the subject of ribbon and broad goods manufacture, it may be well to point out some of the important differences between the kinds of goods made

[20] *Rept. Ind. Com.*, Vol. 14, "Silk Manufactures."

[21] *Repts. Com. and Nav.*, for respective years. Also, Wyckoff, *Silk Goods*, p. 23.

[22] In the Act of 1909 the duty on sewing silks was changed from 30% to a specific rate. The new rate is estimated to yield as much as 58% ad valorem. Cf. U. S. *Senate Doc.* No. 77, 61st Cong., First Session (published June 3, 1909), p. 61.

and their methods of production in Europe and in this country.

One thing our home industry can not do; that is, turn out silks on hand looms. The cost of labor skilled enough to run a hand loom is between two and ten times as much in this country as in other parts of the world. In France, Germany, England, and Japan, hand looms are still largely used and have their legitimate economic place in the silk industry. How do hand fabrics differ from those woven by machines? Machine weaving requires the silk fibre to have two qualities, strength and uniformity. It must be strong to stand the strain incident to weaving done by power, because a broken fibre causes a great loss of time and labor. It must be uniform because a single flaw will ruin the appearance, and hence the value, of an otherwise perfect piece of cloth; and a constant watch for flaws on the part of operators requires still more labor and often an entire stoppage of the machine to remedy the faults.

Two widely different kinds of fabrics are made on hand machines. Where the fibre is not uniform, and where it is not strong, the hand loom comes into play. Weak fibres are not so liable to break when woven by hand as when employed on the high-tension power loom; if they do break the machine can be stopped and the fault remedied in much less time. It has been said that it costs five times as much to stop a machine in America as in France.[1] The loss from the added cost of labor in other countries is more than made up by the facts that much cheaper raw material may be used, that the expense of sorting and unifying the threads is done away, and that far less expensive equipment is required. In this country the added expense of labor outweighs every other consideration.

[1] Wyckoff, *Silk Goods*, p. 26.

The products turned out under these conditions are of comparatively inferior quality. They are less strong, less uniform, and less pleasing in appearance than the articles turned out on the machines of America. They used to form one of the considerable items of export to this country, and went to the making of workingmen's blouses and cheap shirt waists.[2] The tariff of 1897, as we have seen, operated particularly heavily on the cheaper grades of silks, for these pay the same specific duty as finer silks of equal weight per yard. The result is that the users of cheap silks are either deprived entirely of these articles or are compelled to pay a much higher price for them.

We must return to the hand loom, for we are not yet done with it. Not the only economic function of the machine turned by human power is the making of cheap products. At the opposite end of the scale it reappears, namely, in the making of goods of much finer and more individual qualities than the power loom can turn out.[3] Among other disadvantages of the power loom is the impossibility of producing on it patterns of great intricacy and elaborate workmanship. Patterns, figures, designs of many kinds may indeed be turned out in great variety, but the requirement for all is that they must be repeating patterns, and must be such as to appeal to the taste of a large number of customers. The loss of time and labor in getting up new patterns and setting a power loom into shape to produce them is so great that American looms find it impossible to make a profit except by producing and reproducing the same patterns again and again. On the hand loom, with its less intricate mechanism, this may readily be done. In fact, it is easy to produce a

[2] *Cong. Record,* 1897, p. 2009.

[3] Allen, *Silk Ind. of World,* p. 28.

single piece of cloth of a peculiar pattern that distinguishes it from any other piece of cloth in the world. Those whose aim is to wear something different from what thousands of others are wearing must turn to the hand loom article. American manufacturers, being obliged to conform to a uniform taste, cannot profitably undertake to produce peculiar or elaborate patterns that either would appeal to only a few, or would be so expensive that only a few could afford to purchase them.

Another advantage of the hand loom is the possibility of producing on it absolutely finer grades of cloth than the power loom can turn out. This is due to the slower movement of the machine, the possibility of giving the fibres close inspection and exercising greater care in the weaving. Goods woven on hand looms will take a higher finish.[4] Heavier fabrics can also be turned off on the hand loom, as the power loom is limited in respect to size of the thread that may be employed.[5] Add to these factors the advantages derived from greater possibilities in the way of design, ornamentation, and exquisite workmanship, and it becomes evident that the hand loom is capable of producing silks that no power driven machine can hope to rival.

These are the goods that we see coming in under the item, "on which the specific duty is less than 50 (now 45) per cent." Of high intrinsic value, the specific duty intended to apply on silks of average quality would let these in at a rate less than that applying under the lowest of the old ad valorem systems, were it not for the qualifying clause of the act. The purchasers of silks of these kinds belong

[4] The finishing process (called apprêt) on the finest fabric is highly developed in Europe. It cannot be done here, both because it involves a great amount of skilled labor, and because the secrets of the art are jealously guarded.

[5] Allen, *Silk Ind of World*, p. 28.

generally to the wealthy classes of the community. Under the conditions that have prevailed since the passage of the Act of 1897, the consumers of the finest silks seem to be in exactly the same position as before. Their products come in as before at a low ad valorem duty.

Concerning this part of the tariff there is apparently no one to complain. Goods comparable to the finest hand made products of Europe are not attempted in this country, and their import and sale here does not oppose the interests of any makers of corresponding stuffs. Still, it is true that manufacturers of high grade silks are indignant that the best foreign goods pay a duty of only 45 per cent, while other fabrics are taxed from 54 up to 200 per cent, and more. The probability is that some who used the medium grades of French dress goods when the uniform rate was 50 per cent have been impelled by the higher prices induced by the specific rates on these to turn to the highest quality of hand made goods, on which the rate *de facto* has not been changed.

We now turn our attention to perhaps the most important question of all, what conditions govern the production of the medium grades of foreign fabrics, those that come most closely into competition with the home made fabrics. The goods under consideration are made under conditions more nearly similar to those of the articles made at home than is the case with the very cheap or very expensive hand loom products. They are made on power driven machines,[6] with the advantage of cheaper labor (and possibly labor of greater technical skill). Foreign machines are run more slowly and more individual attention is given to the weaving by the operator. There is more trouble taken to prevent waste of

[6] Even in Switzerland, where the power loom has attained its greatest development in Europe, the number of hand looms exceeds the power driven machines. Cf. Allen, *Silk Ind. of World*, pp. 41 and 49.

thread through breakage, thread ends, and throwing away of flawed fibres, which forms an element of expense in American conditions of production, but which at home is not so expensive as would be the cost of the labor necessary to avoid the waste. In Europe the operators have the machines in their own homes for the most part (or in small *ateliers* where four or five workers live together), and labor ten, twelve, and even sixteen hours per day. In this country the work is carried on in large factories, and nine or ten hours per day is the limit of the workable time. In the matter of quality of products there is little difference. The Americans have perhaps a slight advantage in the matter of using the latest machinery and in the fact that strong and uniform threads are used, while Europeans gain through the closer personal attention given to the weaving processes. There is one point, however, in which foreign manufacturers have a noticeable advantage over those at home; the cost of labor being cheaper, they can afford to change patterns oftener and make fabrics in greater variety on the more expensive power loom products. Hundreds of thousands of dollars worth of French silks are sold here every year at a higher price than an equally good or even better American cloth, simply because the patterns are of a greater variety and give evidence of foreign manufacture. One of the commonest pleas to silk producers in the yearly reports of the Silk Association of America is that they give more attention to variety in cloths and patterns.[7] But to change a pattern costs time and labor, and these are expensive; of a unique design a manufacturer can risk making only a small amount, while there is the extra cost of making up a pattern and setting up the machine. The American fears the competition of foreign power-

[7] *Thirty-fourth Ann. Rept. Silk Assn.*, pp. 22-24.

woven fabrics, not because they are better, but because they are made with cheaper labor and they are attractive because of their "infinite variety."

These are practically the only products on which the specific tariff applies and which continue to be imported. The specific rate on these averages about 54 per cent.[8] The result has been a raising of price to the consumers, who have turned their demand partly to the American products, and for the rest have continued to buy the old articles at the higher price. It is doubtful just how much the importations of the medium grade of foreign silk fabrics have been cut off by this application of the specific schedule to their case, for the reason that under the old ad valorem plan, when everything paid 50 per cent flat, there was no telling just what proportion of importations was cheap, medium, or high grade goods. To deal with this phase of the situation, we must consider the more recent history of the conditions prevailing in the American industry in regard to these products.

### 15. DEPENDENCE ON PROTECTION: RIBBONS.

It will be remembered that the manufacture of ribbons was the first result of the Civil War tariff; and indeed the narrow goods industry has long stood next to sewing thread and twist manufacture in its adaptability to American conditions of production. In 1900 85 per cent of the ribbons used in this country were made at home; at present the proportion is even larger. The following figures show the yearly domestic production, compared with the foreign importations since 1890.

| | U. S. Production of Ribbons | Imports of Ribbons |
|---|---|---|
| 1890 | $17,081,000 | $1,900,000 |
| 1900 | 18,467,000 | 1,800,000 |
| 1905 | 21,890,000 | 1,850,000 |

[8] *Rept. Com and Nav.*, 1898-1908, Imports for consumption.

Ribbon importations of late years have been limited to those of fancy design and pattern, especially such as are heavily brocaded and figured, and Parisian novelties.[1] Ribbons are woven, like broad goods, but not with a flying shuttle; there is a fixed shuttle or spindle that moves back and forth with great rapidity, somewhat resembling the shuttle in a sewing machine. In no branch of the industry has American inventive genius been so actively employed as in perfecting the ribbon machines.[2] Up to 1890 the principal improvements were directed toward increasing the speed of the mechanism.[3] At that time all the looms were of German and Swiss manufacture or pattern.[4] The year 1889 marks an important step in the development of the industry; in that year was invented in the United States the so-called "high speed automatic ribbon loom."[5] Under the old method of handling the warp it was necessary to employ men on the looms. On the new machines the warp is placed on beams similar to broad silk looms, and is let off automatically from each beam, making it unnecessary for the operator to go behind the loom for this purpose. It is noteworthy that this new device not only increased the rate of output, but increased also the efficiency of the labor employed. The next steps were in the direction of increasing the number of shuttles on each loom, so that the operator could attend to more ribbon lengths at one time.[6] The latest invention along this line is the "double-deck batten"[7] making two "decks" of shuttles all within easy reach of the operator.

[1] *Thirty-second Ann. Rept. Silk Assn.*, p. 49.

[2] Allen, *Silk Ind. of World*, p. 29.

[3] U. S. Census 1890, *Manuf. Ind.*, Pt. III, pp. 221-2.

[4] U. S. Census 1900, Vol. IX, pp. 209ff.

[5] Allen, *Silk Ind. of World*, p. 29.

[6] From Mr. Frank Essex, of Paterson, N. J.

[7] U. S. Census *Bull.*, No. 74, p. 182.

The new ribbon looms are almost as automatic as the simple braid and thread-making machines, the only care of the operator being to keep a supply of thread on the spools and to tie up broken ends. This statement applies more particularly to plain ribbon weaving. For ribbons with designs and patterns innumerable devices have been invented, too complex and technical to describe. Each device, however, which adds to the complexity of the pattern, decreases the speed of the loom and increases the amount of labor necessary to turn out a given unit of product. Since 1889 there have been great advances made in the devices which produce ornate and figured weaves, the first of these being a swivel attachment which makes embroidered effects that before had been possible only on the hand loom.[8] Since then there have been many improvements and inventions, some for turning out new patterns and figures, but mostly directed toward adapting the new devices for use on high speed looms.[9] The result is that now most of the figured ribbons can be turned out on the high speed automatic looms at practically as low a proportionate cost for labor as the simpler kinds.

In spite of all that has been done in this direction, it is nevertheless still true that the ribbons of very fancy designs cost proportionally more in labor than the simpler kinds. The more complex and diversified the pattern, the more does the product offer itself to competition from the foreign made article. The chief trouble seems to lie in the cost of labor in changing pattern cards. The more ornate articles are limited in the amount that can be turned out of one pattern, for any peculiar design is likely to hit the taste of a few only. Again, the most complex and heavily figured weaves cannot as yet be

[8] U. S. Census 1890, *Manuf. Ind.*, Pt. III, p. 221.

[9] *Twenty-ninth Ann. Rept. Silk Assn.*, p. 54.

made, even in large quantities of a single pattern, without a more than proportional cost for labor. The result has been a vastly increased production of the same old designs, such as will satisfy the general run of customers. In fact, the industry has suffered considerably from over-production.[10] Again and again the cry has arisen that the product of American mills should be diversified. "The Yankee manufacturer", says a contributor to the Silk Association Reports,[11] "can compete mechanically with, if not outstrip, any looms of the Old World. But unfortunately, it stops there; he has come to the parting of the ways; quantity, quantity is the one sign that attracts him. Qualiy, ideas, ingenuity, textures, originality are left for others to exploit. . . . We must learn to diversify our manufacturers more. In the mad scramble for yards all else is forgotten. The weaver's motto is not 'how good, but how many' and the mill owner encourages him to the full extent."[12]

No wonder. The field where the domestic manufacturers' greatest profit lies, is not in the direction of a product which requires more skill, more workmanship, more labor per yard; development in that direction leads very quickly to the point where the cost of production exceeds the selling price of the product. His only hope is in the opposite course, away from the field where the foreigner, with his cheap skilled labor, stands so strongly intrenched. In one way, the aim of both is the same: to get the greatest value out of each unit of expense, to arrange their factors of production in the most economical way. With the price of labor much higher in this country than abroad, the domestic manufacturer must econo-

[10] *Thirty-fourth Ann. Rept. Silk Assn.*, p. 95; *Thirty-first Ann. Rept. Silk Assn.*, p. 41.

[11] *Thirty-fourth Ann. Rept. Silk Assn.*, p. 22.

[12] *Thirty-second Ann. Rept. Silk Assn.*, p. 48.

mize on labor and lay greater stress on the use of machinery. He must turn out fabrics in the making of which the part played by machines is proportionally the greater, and the part played by labor correspondingly less. The monotonous simplicity and uniformity of our products may be regrettable from the artistic point of view, and may lead to "overproduction"; but the cry for diversity would lead our manufacturers in the wrong direction.

Ribbons of complex designs and patterns are still made here. There are two causes for this. One is that the ribbon industry is protected by a duty of 50 per cent on importations from abroad. Thus narrow goods requiring proportionally more labor than the plain uniform weaves may still be made here and sold at a price lower than the price of the foreign article plus the duty. On the other hand competition among domestic producers[13] in the fabrication of the plain goods has so reduced profits[14] that many find it advantageous to undertake the more complex kinds. The higher prices which these bring compensate for the cost of the additional labor employed, while not high enough to enable the foreigner to send his goods in over the tariff barrier.

Undoubtedly a certain portion of the ribbon industry is still dependent on the tariff for protection. The larger part, however, seems to be within hailing distance of independence. Recent inventions have made the operation of many ribbon looms almost automatic. The double-deck batten loom not only increases the yardage output of the operator, but is a machine which calls for a display of quickness, general intelligence, and mechanical ability on the part of the operator rather than for technical skill. Development of mechanical appliances along these

[13] *Thirtieth Ann. Rept. Silk Assn.*, pp. 27-38.

[14] *Ibid., pp.* 49-50.

lines offers promise that the American ribbon loom worker may before long turn out products more cheaply than his European brother all along the line. Most kinds of ribbons are already produced here as cheaply as they can be made abroad, and would hold the domestic market against foreign competition even if there were no tariff to raise the price of the European product. This is particularly true of the plainer fabrics and designs that will hit the average taste. Ribbons of complex and ornate designs suitable for power-loom weaving probably could not hold their own without some degree of protection. They must be turned out more slowly, their labor cost is greater. The amount of labor and technical skill required for these goods, however, has been constantly decreased by new inventions adapting Jacquard and swivel attachments to the high speed automatic looms.[15] Improvements may go to such a point as to make it possible to turn out ribbons of the most complex repeating patterns with as small a proportion of labor cost as the plain weaves. These are the articles on which a continuation of the protective policy could be justified, on the ground that a little more development might in time make their production as cheap here as abroad. In that case we might hope to see a very considerable part of our ribbon industry completely emancipated from dependence on a protective tariff.

Let us summarize briefly: The plainer kinds of ribbons and those of repeating patterns can be made here as cheaply as abroad. Those of very complicated design, if suitable for power loom weaving, could not at present be made without tariff protection, but give promise of continued development and ultimate independence.

There are, however, ribbons of special and unique pat-

[15] Allen, *Silk Ind. of World,* p. 29. Also U. S. Census *Bull.,* No. 74, p. 182.

terns, fashionable novelties and specialties, not suitable for mechanical weaving, which cannot be produced to advantage in this country; they are hand-loom products. A very few of them are made here under the stimulus of tariff protection, but their makers find it almost impossible to compete in the market with foreign goods, the home prices of which are raised more than 50 per cent by the import duty and cost of transportation. There is an economic loss involved in continuing artificially to stimulate the production of such fabrics in the United States. The labor used in making them could be more productively employed in other industries, and the removal of the tariff on handmade specialties would result in an appreciable lowering of price to consumers.

### 16. DEPENDENCE ON PROTECTION: BROAD GOODS.

Closely analagous to conditions in the ribbon industry are those applying to the manufacture of broad goods. The situation is more complicated in the latter case, however, because of the greater variety of the products and the greater importance of this branch of the industry. The problems presented are, therefore, most difficult, and must be approached with the utmost care.

The manufacture of silk dress goods in the United States has now reached proportions truly enormous, this class alone representing more than half the total silk production in the country.

Production of Dress Goods in America.

| | | Increase |
|---|---|---|
| 1880................ | $4,115,205 | |
| 1890................ | 22,900,000 | 590% |
| 1900................ | 52,152,000 | 127% |
| 1905................ | 66,917,000 | 28% |

It will be remembered that the fabrication of piece

goods had been started only a few years before 1880. The increase from 1880 to 1890 was largely a natural growth, aided materially by the betterment in the grades of raw silk received from the East and the concomitant change from hand loom to power weaving. The increase during the next decade, from $23,000,000 in 1890 to $52,000,000 in 1900, was due to several causes. The growing use of silks, the better organization of mills and factories, the higher tariff and better business conditions after 1897 all contributed their share. Greater than any other factor, however, in causing an expansion of 127 per cent in the output, was the progress in the invention and improvement of weaving machinery. The stimulus from this source began about 1888 with a swivel loom attachment which produced embroidered effects that before had been possible only on the hand loom. A number of other appliances followed in quick succession—winders, doublers, wrappers, quillers, and Jacquard dobbies too numerous to mention. Some of these were of foreign, but most were of American origin.[1] Distinctly peculiar to this country are all appliances aiming to increase the speed of the weaving or the rate of the output. In fact, nearly all the foreign inventions were adaptable only to slow-moving looms, and to make them of use required that they be entirely made over to fit our rapidly moving machinery.

With all this change and improvement the American loom was acquiring gradually a character of its own, which distinguished it more and more appreciably as time went on from the power looms in use in Europe. One might think that the new inventions and constantly new appliances would make for greater complexity, a greater number of intricate parts. Quite the contrary

[1] U. S. Census 1890, *Manuf. Ind.*, Pt. III, p. 221.

is true. Ready as are our manufacturers to experiment with new devices, and to adopt those that are successful, there is one requirement that every new invention must possess. Simplicity is the keynote that runs through all our machinery.[2] Everything that is complex or intricate is viewed askance. There are several natural reasons for this. In the first place, the American weaver is not a skilled artisan. He has no time to go to a training school to learn the technical details of any particular branch of the industry; but give him a simple machine, and he will grasp its running operation without special schooling. Second, complexity of mechanism means not only greater skill and more training, but more labor time; there are more parts to break or get out of order, there are more chances of broken threads in awkward places. Third, it is evident that simplicity makes for greater speed in running, and a higher rate of output. Lastly, complex mechanism costs more to make.

For many years these factors have been active in shaping the course of evolution of American weaving machinery. Nowhere had inventive genius in connection with the power loom been so notable as in the United States.[3] The result cannot be better expressed than in the words of Mr. Jacques Huber in a report made to the Swiss government on the silk industry of the United States. "A factor not to be left unnoticed is the world-renowned simplicity of American machinery, which enables a simple weaver to do work which in other countries can only be done by the most skilled and experienced."[4] Americans have long been ahead in cotton

[2] *Twenty-ninth Ann. Rept. Silk Assn.*, p. 54; also Allen, *Silk Ind. of World*, p. 26.

[3] *Thirtieth Ann. Rept. Silk Assn.*, pp. 52-54. Allen, *Silk Ind. of World*, p. 29.

[4] *Twenty-ninth Ann. Rept. Silk Assn.*, p. 54 (1901).

weaving,[5] but experiment and invention in the case of silk weaving machinery came late, and it is only within the past ten or fifteen years that we have forged ahead of other nations in this respect.

As an illustration of the differences that have grown up during recent years between domestic and foreign looms, the writer was given an account of the history of a certain English ribbon loom which came by a curious process into the possession of Mr. Frank Essex, of Paterson, New Jersey. The loom was imported under the impression, which later proved to be false, that it embodied some new and valuable ideas in ribbon weaving. The manufacturer who first brought the loom from England found the mechanism so complicated that he could not even discover how to make ribbons on it. He therefore sold it at half price to another man who had great confidence in his ability to make the thing go, but it proved to be a white elephant on his hands as well. It was thereupon sold to Mr. Essex for a mere song. He spent a whole afternoon and evening studying it out, and finally solved the problem of making ribbons, but declared it was totally unfit for use in this country. He thought, however, that by tearing down the whole back side of the loom and fitting it with the simpler and more efficient American appliances he might make it go. The loom is now in use in his mill, but is not by any means as satisfactory as a machine of domestic make.

The most pronounced features of American power looms are today their light construction, ease in handling, simplicity in operation, accuracy of weave, and moderate cost.[6] Especially encouraging is the fact that

[5] Montgomery's *Cotton Manufacturing in the United States* takes note of this as early as 1840.

[6] Allen, *Silk Ind. of World*, p. 29; also cf. *Twenty-ninth Ann. Rept. Silk Assn.*, p. 49.

the machinery is practically all made in the United States.[7] The Crompton and Knowles Loom Works of Worcester, Massachusetts, one of the largest loom making concerns in the world, turn out every variety of broad goods and ribbon loom in use in this country. The superiority of their products over the looms made in Europe is now generally recognized.[8]

Nor are there any signs of a halt in the forward march of improvement. There has probably been more progress in improved weaving machinery in the last decade than in the three preceding decades.[9] The mechanical devices, all working automatically, have effected a truly remarkable saving in time, labor, and material. The Jacquard loom has undergone so many alterations and improvements in the last ten years as to have become almost a new loom.[9] Especially noticeable are the increase of speed and the saving of pattern cards. The older looms used to require a long pattern or indicator chain. The chief advance is in saving this pattern and in producing duplications. Moreover, by dispensing with this long and cumbersome attachment the machine is capable of a much higher speed.[10] By the two-weave multiplier and the manifold multiplier, two, three, or more distinct weaves are produced in the loom and indicated from the same pattern chain. The list of improvements is long, and cannot be described without going too far into technical details; but they all tend to increase the efficiency of the labor employed in weaving, to make possible the fabrication of articles with less labor than had before been necessary.

[7] *Twenty-ninth Ann. Rept. Silk Assn.*, p. 54. *Report* of Mr. Jacques to the Swiss Government.

[8] *Twenty-ninth Ann. Rept. Silk Assn.*, pp. 55ff.

[9] Allen, *Silk Ind. of World*, p. 27.

[10] U. S. Census 1900. Vol. IX, p. 223. *Thirtieth Ann. Rept. Silk Assn.*, p. 52.

This review of the development of conditions of production in the broad goods industry explains the enormous increase in the output in the last fifteen years. Aided by a higher protective tariff, by general business prosperity, and by improvements that caused a marked decline in the cost of production, the annual output jumped from $52,000,000 to $67,000,000 in only five years.[11] Another indication of development is seen in the new equipment installed from year to year.

New Looms Installed.[12]

| | Broad Goods | Narrow (Ribbons only) |
|---|---|---|
| 1901 | 2328 | 356 |
| 1902 | 5500 | 312 |
| 1903 | 3797 | 450 |
| 1906 | 1268 | 383 |

From 1901 to 1905 there were no less than 18,000 new broad looms and 2200 ribbon looms put into operation.[13] Naturally growth could not continue at such a rate indefinitely. The constantly larger stocks of goods put upon the market brought a natural fall of prices.[14] In 1906 the secretary of the Silk Association writes of the "extreme low prices"[15] which have caused "a serious depression in the silk trade." In the same report he says, "In point of yardage (in 1906) the silk business has been greater than in any preceding year . . . Machinery equipment has been greatly added to and has been in fairly active operation, while the product has gained largely in distribution and consumption."

[11] U. S. Census *Bull.* No. 74, p. 174.

[12] *Thirty-first Ann. Rept. Silk Assn.*, p. 24, 1901 and 1902. *Thirty-second Ann. Rept. Silk Assn.*, p. 20, 1903. *Thirty-fifth Ann. Rept. Silk Assn.*, p. 18, 1906.

[13] *Thirty-fourth Ann. Rept. Silk Assn.*, p. 24.

[14] Allen, *Silk Ind. of World*, pp. 37-38. Also *Thirty-fourth Ann. Rept. Silk Assn.*, pp. 20-21.

[15] *Ibid.*, p. 21.

In a word, the silk industry today is in a position that has been characteristic of so many protected industries in this country. Aided by a higher protective tariff, and in this case by marked economy of production, large profits for a while attended the making of silk fabrics. The large profits have resulted in a rush of capital to the industry; new plants have been put up and old ones enlarged.[16] The resulting enlargement of production has been followed by competition among producers, lower prices, and lower profits. The lowering of profits has been put off longer than would otherwise be the case by the constant progress in the economy effected in the cost of production. On the other hand, the evil day has been somewhat hastened by the depreciation in the value of gold, which has put up the price of raw silk and of wages paid to labor.[17]

The situation has brought forth another result that deserves mention. Increasing competition and desire to undersell his rivals, at first led the manufacturer to increase his quantity of output at the expense of quality. The fabrics deteriorated sadly for several seasons, until by 1906-7 loud complaints were heard from consumers.[18] It might be said, it is true, that this is a sound economic trend; that progress under American conditions of production lies, as we have seen, in the direction of large output of plain fabrics. But the analogy in this case is not a true one. Our advantage over the foreigner lies, it is true, in plain fabrics, or those of the simpler patterns; but that does not mean goods of inferior *quality*. Our looms are capable of turning out perfect weaves,

[16] *Cf.* U. S. Census figures:

| | 1890 | 1900 | 1905 |
|---|---|---|---|
| No. Plants | 472 | 483 | 624 |
| Capital (millions of dollars) | 51 | 81 | 109 |

[17] *Thirty-fifth Ann. Rept. Silk Assn.*, p. 17.

[18] *Thirty-fourth Ann. Rept. Silk Assn.*, pp. 22 and 24.

in fact are noted for their excellence in that respect. The increase in yardage output which results from over-hasty or inferior work is very small, much too small, in fact, to make up for the loss of value in the article so made. There is a certain standard of quality to which silk goods, more than any other fabrics, must attain, or they quickly lose favor in the eyes of consumers. It is written in the economic laws of the country that our looms must move rapidly, but it is as sternly true that they must not turn out inferior goods.

It is encouraging to note that these truths have within recent years come to be realized by the American producer of silk goods. Protests from consumers, a falling off in sales, and a growing predilection for honest articles of foreign make even at higher prices have warned the domestic manufacturers that the poorer goods could not be sold at a profit.[19] "Practically unanimously", says the secretary's report for 1907,[20] "they resolved on honest construction of the fabric." The result is said to have been a restoration of the former prestige of domestic silks, and considerably better conditions in the silk trade.[21]

This review of the recent conditions in the dress goods industry clears the way for some general conclusions as to its relations with the tariff and its profitable future. In the first place, it may be safely said that the wonderful progress made in the last fifteen years, and especially the last ten years, practically place the manufacture of most dress goods in the same class with ribbons as regards its adaptability to American conditions of production. The ever increasing application of labor saving

[19] *Thirty-fourth Ann. Rept. Silk Assn.*, pp. 24-5.

[20] *Thirty-fifth Ann. Rept. Silk Assn.*, p. 17.

[21] *Ibid.*, pp. 16-17. *Semi-Ann. Rev. Silk Trade*, 1908, "Trade Prospects."

devices in this industry, together with progress in the throwing branch—which has resulted in lowering the cost of his raw material to the dress goods producer—has operated to diminish the advantage the foreigner has always had in the matter of lower wages to such an extent that many kinds of dress goods are now made as cheaply in this country as abroad. Price comparisons here and abroad are almost impossible, owing to the difficulty of being sure that the articles compared are of exactly the same grade and quality; but, so far as the opinion of experts can be trusted, we begin to hear frequent accounts of dress goods cheaper here than in Europe. Mr. Franklin Allen writes in his "Silk Industry of the World",[22] "In the fall of 1900 . . . plain and fancy silks were sold 50 per cent cheaper than the previous year, *and for much less than in any European capital.*" This condition was brought about, he explains, because of a surplus production, but the incident is instructive as showing that our dress goods may sell for "much less than in any European capital." Quite as striking and significant are the words of a *foreign* contributor to the Silk Association reports, "We have long since on this side of the water given up the claim to regulate silk prices; America is now the all-powerful regulator. Uncle Sam makes sunshine and rain in the silk trade."[23] The Hon. J. H. Gallinger, United States Senator from New Hampshire, speaking before the members of the Silk Association, said, "The improvements in power loom making in America have been so marked that no country in the world is so well equipped relatively as the United States for a low priced production of silk goods. Steadily improving equipment in machinery,

[22] Published in 1904.
[23] *Thirty-second Ann. Rept. Silk Assn.*, p. 20.

large crops of raw material, and the keenest domestic competition, have all been factors in reducing prices of manufactured goods."[24] We have yet to consider whether domestic prices would not in the long run average as low as the foreign.

In the section dealing with the results of the Tariff of 1897 the course of recent importations of dress goods was considered at some length. We have seen that there are certain kinds of broad fabrics which cannot be produced here in competition with Europe. The specific duties, as was seen, fall so heavily on the cheaper hand loom fabrics as practically to prevent their importation. Within the last few years there has been an increase in the very cheap silks imported from Japan, but these are made largely with "wild" silk and have been coming in under the head of "spun or waste silks" at about 35 per cent.[25] Another kind of hand loom product not made here is the very valuable broad silk fabric. Weaves of highly complicated design and great variety of materials require extremely slow production and the most skillful of operatives. These fabrics, under the peculiar working of the recent tariffs, have paid only 45 or 50 per cent duty, and have furnished a little more than half of our importations of dress goods. Between the two stand the debatable ground, the machine-made products of medium grades, in which our manufacturers compete with those of foreign make. The average duty paid on all goods is some 54 per cent, so that we may say that the duties paid by fabrics of this kind that now enter the country lie somewhere between 54 and 60 per cent. Let us consider the character of these products.

First of all, there are goods of unique and limited de-

[24] *Twenty-ninth Ann. Rept. Silk Assn.*, p. 72.

[25] *Thirty-third Ann. Rept. Silk Assn.*, p. 36, also p. 82. *Thirty-fourth Ann. Rept. Silk Assn.*, p. 88.

signs, of which no great quantity can be turned out of a single pattern. The labor cost of stopping looms and making new patterns which have a very limited market is too great for our producers. In this class should be included many "specialties" and "Parisian novelties" which, though usually more suitable for the hand loom, can sometimes be made on European power machines. It is extremely doubtful if a much higher tariff would prevent the continued importation of fabrics of this kind, and as the demand for them, owing to their peculiar nature, is stricly limited, it is equally doubtful whether a lower tariff would increase appreciably the amount sent over here. In fact it is hardly true to say that they compete, except in an indirect way, with fabrics made here.

Second, there are certain very closely woven goods known as *mousseline* or *messaline façonné,* which are imported in large quantities.[26] These are "beaten" very closely, containing a great many picks—sometimes as many as 160 picks to the inch,—and as in this country most manufacturers have to pay the operative a wage based on the number of picks, in reality it almost prohibits their manufacture here.[27] In fact, our manufacturers have never been able to produce *mousselines,* in spite of many[28] repeated attempts. These goods cannot be said to compete with anything made here, except in the sense that some purchasers might use *mousselines* if they were cheaper instead of some other kind of broad fabric.

Besides the two classes of goods described, mention should be made of fabrics which are imported from special or peculiar causes. Some, for example, were imported because of the unwise deterioration in the quality of the goods which our looms turned out from 1903 to

[26] *Thirty-second Ann Rept. Silk Assn.,* p. 47.

[27] Mr. M. C. Migel to the Silk Association, *ibid.,* p. 48.

[28] *Thirty-fourth Ann. Rept. Silk Assn.,* p. 82.

1906. The result was a wider demand for the better European fabrics.[29] Sometimes a sudden change of fashion favors certain patterns or weaves imported from abroad before our looms can set to work on them, though it is as likely to be the domestic article that is so favored. In recent years New York has set the fashions for this country rather than Paris.[30]

We see, therefore, that except for importations due to causes of an accidental nature, the *power-loom* dress goods now actually sent to this country are practically limited to specialties and *mousselines*. The demand for all other kinds of machine-made broad goods, those that would really come nearest to competing with American products if imported, is now satisfied normally by domestic products. This result has been attained only within recent years, and must be attributed partly to the tariff and partly to the advance in mechanical appliances. True, the tariff protection is usually given almost the entire credit. Mr. Paul Schultz of Crefeldt made the statement at the St. Louis Exposition that "The high tariff had killed the silk trade that formerly Germany had with the United States."[31] It is undoubtedly true that the Tariff of 1897 may fairly be given a great deal of credit for stimulating invention and mechanical improvement. The industry had not developed then as it has since. The chief importance of the Act of 1897, viewed from the standpoint of protection, was to curtail the importation of certain machine-made products of rather elaborate design and pattern. A large part of the inventions were in the direction of producing these patterned and embroidered effects by automatic appliances, or adapting such appliances to high-speed looms. All such products are now

[29] *Thirty-fourth Ann. Rept. Silk Assn.*, p. 25.

[30] Allen, *Silk Ind. of World*, p. 39.

[31] *Thirty-fourth Ann. Rept. Silk Assn.*, p. 87.

made in the United States.[32] Yet it is a question whether these improvements might not have been made without the aid of the tariff. The recent advances made in the throwing branch, in their way as remarkable as the improvements in broad goods looms, were achieved without any special protective stimulus. It may be, however, that the higher prices on products of this kind, due to the increased import duties, furnished just the spur needed to induce the invention of mechanical appliances that would make their manufacture possible in this country.

We come at length to our general conclusions as to the dependence of the broad goods industry on protection from foreign competition. It is probably safe to say that many kinds of broad goods are made as cheaply here as in Europe. Our rapidly moving machines, and the appliances for the saving of time and labor, have now reached the point where the greater cost of labor here is, in the case of many fabrics, offset by the greater efficiency of each operator. Moreover, the progress made in the throwing of silks does away with one of the greatest obstacles to freeing the industry from dependence on the tariff. The nature of the silk fibre has long stood in the way of the independence of the silk manufacturer; it has prevented that extensive use of labor-saving machinery which is characteristic of American industry. That obstacle is in a fair way of being eliminated. The raw material now costs the American weaver of broad goods no more, if as much, as it does the foreigner. The silk manufacturer should before long be in the same position as the manufacturer of cotton goods. The chief advantage enjoyed by the latter now is that his industry is longer established.

This is not to say by any manner of means that we

[32] Allen, *Silk Ind. of World*, pp. 26, 27, 30. *Thirty-fourth Ann. Rept. Silk Assn.*, pp. 81, 83, etc.

can hope to excel the foreigner in the making of all broad silks. We cannot compete in hand-loom products. As we have seen, however, the inferior cheap hand-loom products compete with nothing made in this country. The more expensive hand-loom goods are not made here, and their value is so great that it is doubtful if they would be sold, even with the tariff removed, at prices low enough to bring them into competition with our machine made goods. The field for the use of these more expensive hand-loom goods is more or less limited, and is for the most part a field for which the American machine made fabrics are not suitable. They are used for heavy furniture coverings, tapestries and curtains, for church vestments and altar cloths, and where fabrics intermixed with gold and silver are required.[33] As these novelties cannot possibly be made here, to keep the tariff on them confers no benefit on any manufactures now existing in this country.

When we come to consider the machine-made products, the situation is different for different classes of goods. The dress goods known as *mousselines* cannot be made here. Almost the same is true of the so-called "specialties," and Parisian novelties. They are not attempted here because no large amount can be turned out of one pattern. They satisfy only a limited class of people, and as there is no corresponding domestic product, the tariff on them might be removed without affecting any branch of the American silk industry.

With regard to other machine-made broad goods there is room for controversy. Many, perhaps most, kinds of power-loom broad goods, particularly those of simple and uniform patterns, can be made here as cheaply as abroad. Even goods of considerably elaborated figures and embroidery work could be made here without special tariff

[33] Allen, *Silk Ind. of World,* p. 28.

protection, granted that the patterns be such that large amounts can be turned out of one kind. There are, however, certain kinds of goods that must be woven more slowly, some figured and embroidered fabrics that require more attention and care—more labor—on the part of the operative. The rule in general holds good with broad fabrics as with ribbons; even when made on power looms, the more elaborate and intricate the pattern, the greater is the proportion of labor involved in their cost of production.

On the whole, the entire removal of the tariff would affect only a part of the broad goods industry—the manufacture of those highly complicated fabrics on which the automatic devices are not yet perfect, or are as yet applicable only to slowly moving looms. It seems probable that in time American ingenuity will perfect the machinery necessary to reduce the labor cost of these textures so that they can be made as cheaply here as abroad. This part of the industry is still young and has not yet reached its point of highest development. For goods of this restricted class, a tariff duty is still necessary for their continued production in America. If the duty could be so arranged as to cover these goods alone, it would be advisable to continue to protect them in the hope that they might in time reach a position of independence. Whether the tariff should be kept on the whole industry for the benefit of the few who make these goods is a serious question. So far as the development of the industry is concerned, it is doubtful if the removal of the tariff would postpone by a great deal the time when the advance of mechanical invention will enable us to make all kinds of power-loom dress goods as cheaply as they are made abroad. We have seen in the case of the throwing industry that the stimulus of high protection was not

necessary to foster improvements; competition, as in this case, might prove a more effective spur.

It is safe to say, then, that there is now no economic justification for the tariff on hand-loom broad fabrics, whether of the very cheap or the very expensive variety, nor on *mousselines* or specialties, none of which are made here.

### 17. DEPENDENCE ON PROTECTION: OTHER FABRICS.

If an attempt were to be made to classify the different branches of the silk industry on the basis of their adaptability to American conditions of production, it would be almost impossible to say in which class many articles belong. The fabrics which we have just considered belong partly to one and partly to the other class. On the whole, however, a large part seem to offer promise of immediate or eventual independence. Of the articles we are about to consider no clear-cut statement can be made. It may be said, however, that the production of many of them contains features which must be scrutinized carefully, before one can say that they are fitted for successful independent manufacture in this country.

A most interesting branch of the industry is the manufacture of dress and military trimmings. The conditions of production of these goods is so peculiar, however, that first it may be well to consider the proportion of hand looms and power looms in use in recent years.[1]

| | Power Looms | | | Hand Looms | | |
|---|---|---|---|---|---|---|
| | Broad | Narrow | Total | Broad | Narrow | Total |
| 1874 ........ | 1,189 | 888 | 2,077 | 779 | 728 | 1,507 |
| 1875 ........ | 1,428 | 1,260 | 2,688 | 1,005 | 809 | 1,814 |
| 1880 ........ | 3,103 | 2,218 | 5,321 | 1,629 | 1,524 | 3,153 |
| 1890 ........ | 14,866 | 5,321 | 20,822 | 413 | 1,334 | 1,747 |
| 1900 ........ | 36,825 | 7,432 | 44,257 | 164 | 9 | 173 |
| 1905 ........ | 47,725 | 8,500 | 56,225 | none | none | —— |

[1] Allen *Silk Ind. of World,* p. 31. From U. S. Census Reports for different years.

It will be noticed that up to 1880 the number of hand looms on broad and narrow fabrics remained about the same. In 1890 the hand looms making narrow fabrics were about three times the number in use on broad goods. In 1900 the total number of hand looms was inconsiderable, and at present there are practically none. These variations are explained by a consideration of the conditions governing the manufacture of trimmings.

In 1890 a small number of hand looms were employed in making patterns, bookmarks, badges, and so forth, while others were engaged in weaving fine tissues, veils, and other specialties. The larger proportion of the hand looms in use in 1890, however, was devoted to the manufacture of dress and military trimmings.[2] We find in this an explanation of the decline in the production of trimmings in this country from 1880 to 1900. Trimmings must not be confused with braids or fringes. The latter are simple uniform cords or cables of various twists and braids, of which an indefinite amount can be turned out on a power machine. Trimmings are short, elaborately patterned articles, of which only a small amount can be turned out at one time, usually produced on a special order. This is particularly true of dress and cloak trimmings. Military and upholstery trimmings are less elaborate and can usually be made on power looms. A large amount can often be turned out of a single pattern, but this is not always true. With these facts in mind, let us glance at the course of production of trimmings since 1880.

The entire value of the trimmings produced in 1880 was $8,300,000, while in 1890 it was $8,500,000. The value of the *military and upholstery trimmings increased* in the sum of $2,700,000 or 190 per cent; that of *dress*

[2] U. S. Census *Bull.* No. 348, p. 15. Cf. also U. S. Census of 1890, *Manuf. Ind.* Pt. III, p. 221.

*and cloak trimmings decreased* $2,500,000, or 36 per cent.[3] The value of the dress goods made from 1880 to 1890 increased from $4,100,000 to $15,200,000; that of ribbons proper from $6,000,000 to $17,100,000; an increase beside which the figures for trimmings stand waiting for an explanation.

The United States Census Report in 1890 says, "The decrease in the latter item" (dress and cloak trimmings) "can only be attributed to adverse fashions."[4] When one remembers, however, the fact that the dress and cloak trimmings were made on hand looms, and that the use of power looms for the military and upholstery class is more or less limited, another explanation of the decline in production seems possible. Let us glance now at the figures of output for 1900. Here we see at once that adversity of fashions can not possibly serve as the explanation. The total value of the production of trimmings of all kinds has declined during the decade from $8,500,000 to the inconsiderable figure of $2,300,000, a decrease of 73 per cent.[5] More significant still is the decline in the use of hand looms; the looms operated by hand for all kinds of narrow goods, including ribbons, have decreased from 1334 to 9.

The conclusion is obvious. Cloak and dress trimmings are products adaptable only to hand loom weaving. The amount of one pattern that can be produced is strictly limited, and such articles stand outside the pale of American conditions of manufacture. Of upholstery and military trimmings this much can be said. When simple, uniform patterns, of which amounts are ordered large enough to make it worth while to put a power loom in motion, we can and still do produce them. In fact, the

[3] U. S. Census *Bull.* No. 348, p. 10.
[4] *Ibid.*, p. 11.
[5] U. S. Census 1900, Vol. IX, p. 203.

uniformity of the article recently turned out has led to a great outcry that more attention should be given to diversifying the product.[6] Quantity rather than quality has been the trend. Yet it is only by producing trimmings of simple patterns in great amounts that the value of the output has increased from $2,300,000 in 1900 to $4,100,000 in 1905. In the plain machine-made trimmings we can compete with the foreigner; when the pattern is elaborate, or heavily set with gold threads, or wanted only in small amounts, it must be procured from the looms of Europe. Labor here is more productive if employed in other directions.

Almost parallel with the movement in the output of trimmings come the statistics in regard to tapestries and curtains. Articles of this kind, if the purchaser desires them of silken material, are usually wanted of elaborate pattern and heavily ornamented with gold threads. Gold threads can be inserted only by the most painstaking personal care on a hand loom. Naturally, too, the amount that can be turned out of one pattern is almost always strictly limited to an individual order. We are not surprised, therefore, to find a decrease in the production of goods of this class. The output of $4,000,000 worth in 1890 had shrunk to $1,000,000 in 1900, a decrease of 72 per cent.[7] These articles can not be produced to advantage on a power loom. There is another reason for this, besides those already given. Tapestries and curtains are usually very heavy and thick in texture. We have already mentioned the limitations of the power loom in regard to the weaving of very heavy fabrics;[8] the double threads, practicable on the hand loom, are impossible on a power machine. Where simple plush or velvet curtains are

[6] *Thirty-fourth Ann. Rept. Silk Assn.*, p. 22 (1906).
[7] U. S. Census 1900, Vol. IX, p. 203.
[8] See also U. S. Census 1900, Vol. IX, pp. 210-11.

wanted we can still make them; where the texture need not be particularly heavy, where the pattern required be not too ornate or heavily figured or decorated with gold threads, our mills can supply the demand. Where the requirements are otherwise, the purchaser must turn to the products of European looms. Articles such as these form a large item in the importations from foreign countries.

As in the case of trimmings, the output of curtains and tapestries has increased slightly since 1900, from $1,000,000 to $1,500,000. This is explainable in part by the increased attention given by manufacturers to the simpler designs and patterns and in part by the fact that these heavy fabrics allow a considerable admixture of cotton. The greater proportion of tapestries made of late contain more or less cotton, but the values of these are included in the figures for silk goods.[9] This gradual exclusion of the gold figured and more ornate curtains from our domestic looms is another illustration of the American producer adapting himself more successfully to the field in which his greatest advantage lies. The hand loom tapestries are left to the foreigner to manufacture.

One other item, the class of goods known as braids, suffered a serious decline in the last decade. The production of braids has undergone considerable change in the last half century. Probably there is no single item in the whole line of silk goods made in America that has suffered so much from the ingenuity, energy, and enterprise of European manufacturers. Braids once formed a considerable part of the silk production of this country. In earlier times they were made of sewing threads simply braided together, and the industry, it seemed, had nothing to fear from foreign competition.[10] The first shock came

[9] U. S. Census *Bull.* No. 74, p. 179.

[10] Wyckoff, *Silk Goods,* p. 47.

in the seventies, when it was discovered that the French were making braids from spun silk, which, so far as appearance went, differed inappreciably from the reeled silk product.[11] For very narrow goods the spun silk article can scarcely be told from one made of reeled silk. Our manufacturers promptly adopted the new method, and during the eighties held their own very well.

PRODUCTION OF BRAID IN UNITED STATES.[12]

| | |
|---|---|
| 1880 | $995,695 |
| 1890 | 2,771,382 |
| 1900 | 1,522,565 |

Then the French began to introduce variations on the simple braid. All kinds of twists, turns, figures, embosses, raised gold and silver threads, and so on, were introduced, in a variety quite bewildering but wonderfully attractive. Novelty was the keynote. Our manufacturers rather unwisely tried to follow the pace set by the foreigner.[13] In 1889 Mr. Henry W. Schloss, a prominent braid manufacturer, and president of the Manufacturers' Association of New York, appeared before the Tariff Committee.[14] He stated in effect that the French and German braids had of late been made with gold, silver, and tinsel threads, and to keep his hold on the market he was compelled to follow the same ideas. The additional labor required was large; the new machinery was expensive, but he had installed it. When he tried to get the gold threads and tinsel, however, he found himself at a loss owing to the fact that the articles he wanted were not made in this country and that there was a duty of 25 per cent on their importation. He asked therefore that a

[11] Wyckoff, *Silk Goods,* pp. 38ff.

[12] U. S. Census 1900, Vol. IX, p. 209.

[13] *Tariff Rev. Hearings,* 1889-90, pp. 600ff.

[14] *Ibid.,* p. 601, Testimony of H. W. Schloss. Se also *Tariff Hearings,* 1908-09, No. 23, p. 3022.

duty of 60 per cent be imposed on braids, to enable him to keep on with his plans. The duty of 45 per cent was raised in 1890 to 50 per cent, and with this degree of protection he had to be satisfied. All these new features required more and specially designed machinery; each new figure and pattern required that the process of production be given more personal attention, more skilled labor. Strangely enough, the addition of skilled labor, instead of hastening production, retards it: each yard has to be given special attention, the machine has to run more slowly. Thus the braid manufacturers were led slowly outside the field within which American conditions require the successful producer to confine himself. Four years later, in the hearings before the Tariff Committee in 1894, Mr. Schloss, who was still struggling along in his attempts to keep up with the foreign-made product, made another special plea for an increase in the duty on braids.[15] He complained that braid production required much skilled labor and very expensive machinery. Most of the machinery, and all the best parts, had to be imported from abroad, paying a duty of 45 per cent. The spun yarn of which his goods were made was obtained at much less expense in France, as it bore a duty of 35 per cent when imported here. Spun yarn made here sold at the full amount of the foreign price plus the duty, therefore much of his raw material was imported. Mr. Schloss claimed, therefore, that his industry enjoyed only about 15 per cent of protection. As for speed of output, he brought out the significant fact that an ordinary weaving loom could turn out from 500 to 800 yards of ribbon per day, as the flying shuttle can ply through two widths of broad goods or through half a dozen to a dozen or more

[15] *Tariff Hearings* 1893, p. 771. Also *Tariff Rev. Hearings*, 1889-90, p. 600.

ribbons, while the braiding machine, with its single width production, is good for only 72 yards per day.

The difficulties experienced by American manufacturers in trying to follow the pace set by foreigners under such trying conditions may be imagined. The production dropped from $2,800,000 in 1890 to $1,500,000 in 1900. And yet, in the fabrication of the simple braids, producers in this country have no difficulty whatever in holding their own. Machines for simple braiding have reached the point where they work absolutely automatically. While on a visit to the factory of Mr. Frank Essex in Paterson, after working hours, the writer was shown a braiding machine which turns out a plain white band about three-quarters of an inch in width. Mr. Essex kindly turned on the power and let it run for over an hour, absolutely unattended, while we inspected the other parts of his establishment. Braids of this character can be produced as cheaply here as anywhere, and the American product has recently been narrowing down to this class of goods. This explains in part the remarkable increase in the manufacture of braids and bindings from $1,500,000 in 1900 to $3,500,000 in 1905.[16] The American manufacturer, in this as in other things, has done well to limit his output to braids that can be turned out on automatic machines.

In regard to the tariff on braids, trimmings, tapestries, and the like, our conclusions are obvious. The simple kinds can be made without tariff protection, the more elaborate and gold threaded varieties cannot be made with it. The duties apparently benefit no one and merely raise prices to consumers of the foreign but non-competing articles.

A curious recent development in the conditions of the industries devoted to the manufacture of fringes, braids,

[16] U. S. Census *Bull.* No. 74, p. 181.

and trimmings, is the growing use of artificial silk.[17] A remarkably close imitation of silk has recently been invented in Germany, composed chiefly of carded cotton and cellulose.[18] This has been coming to New York in ever-increasing quantities,[19] in the form of silk yarn, paying a duty of 30 per cent. Selling much cheaper than real silk yarn, the new product has offered too tempting a prospect of larger profits for our makers of braids and trimmings to resist. The notable increase in the imports of "spun silk yarn" of recent years indicates the impetus that has been given to the prdouction of artificial silk braids and trimmings.

IMPORTS OF SPUN SILK YARN.

| Year | Value |
|---|---|
| 1902 | $459,253 |
| 1903 | 788,399 |
| 1904 | 1,125,565 |
| 1905 | 2,305,847 |

These figures represent principally artificial silk yarns.[20]

This state of affairs presents some curious problems. For most purposes the physical and chemical qualities of the artificial silk unfit it for use in making honest fabrics. Artificial silk is very thick, and has the property of distending and disintegrating in water. It greatly excels natural silk in brilliancy. For passementerie goods and trimmings it has proven so suitable that for such purposes it is even preferred to natural silk.[21]

The American manufacture of velvets and plushes

[17] *Thirty-third Ann. Rept. Silk Assn.*, p. 52.

[18] *Ibid.*, pp. 91ff.

[19] *Ibid.*, p. 53. Also *Thirtieth Ann. Rept. Silk Assn.*, p. 50.

[20] *Thirty-second Ann. Rept. Silk Assn.*, p. 52. As seen in the review of the tariff rates imposed in 1909, artificial silk now bears a specific duty levied by the pound. The manufacture of this peculiar article seems to have been started about 1905. See *Tariff Hearings* 1908-09, *First Print* No. 35, p. 5147.

[21] *Thirty-second Ann. Rept. Silk Assn.*, pp. 92-3, also *Tariff Hearings* 1908-09, *First Print*, No. 23, p. 3018.

presents some interesting features. The year 1888 marks the first serious attempt to produce pile fabrics here.[22] The method of production seems to have been an adaptation, at first, of the processes by which cotton plushes and velvets are made. The new fabrics had cotton backs and the pile alone was silk; nor was any attempt made at figured or ornamented surfaces.[23] An account has already been given of the pile fabric items in the Tariff of 1890, showing how a specific duty was imposed bringing the rate up to an equivalent of 75 per cent ad valorem. The result was one that frequently ensues when an industry is suddenly encouraged by protection from foreign competition, with an alluring prospect of high profits and monopoly of the home market. There followed a mushroom growth of plush and velvet manufacturing plants, and several foreign producers transferred their establishments to this country. Then came a period of heavy production, home competition, and lowering of prices. The product, originally not of the highest quality, became cheaper and more trashy, while the manufacturer attempted to meet the lower prices by lower cost of production. Reductions in wages were followed by numerous strikes,[24] and by 1894 practically the whole industry was in the receiver's hands.[25]

After 1894 the industry returned to normal conditions. Under a tariff reduced in 1894, but still somewhat higher than that enjoyed by other branches of the silk industry, our manufactures of pile fabrics have had a slow but steady growth. The competition from Europe has compelled a higher quality of fabric, but on the whole the cheaper grades can be manufactured here with profit.

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[22] *Tariff Hearings*, 1893, p. 1022.

[23] U. S. Census 1890, *Manuf. Ind.*, Pt. III, pp. 220-21.

[24] *Tariff Hearings*, 1893, pp. 1029-30.

[25] *Supra.*, Sec. 9.

Pile fabrics do not lend themselves as readily as other articles of silk to the conditions of power-loom production,[26] and the better grades of European manufacture are still made by hand. Improvements have taken place, however, that brighten the prospects of this industry for the future. The attachment of the swivel loom makes possible the production of embroidered and ornamented effects that before were obtainable only on the hand loom.[27] More recently there has been invented a very efficient silk velvet ribbon loom[28] which runs at high speed and works almost automatically. On the whole, the plush trade has been prosperous of late years.[29] The production of $5,000,000 worth in 1900 was an increase of 57 per cent over the total produced in 1890. Considering the fact that the industry had but just started two years previous to 1890, the increase in 1900 is not large. Still, it shows that it is not declining, and a continuation of tariff protection in this case may be necessary to its development.

A noteworthy phase of the pile fabric situation is the change in the proportion of plushes and velvets. In 1890, while there are no figures given for the two items separately, it is well known that by far the larger proportion of pile fabrics manufactured was plushes.[30] Of the deterioration in American plushes and the change in fashion we have already spoken.[31] In 1894 the rage for seal plushes began to die out, and our manufacturers turned their attention to the cheaper, plainer, more uniform velvets. In 1900 there were 5,122,249 yards of velvets

[26] Wyckoff, *Silk Goods,* p. 34.

[27] U. S Census 1900, Vol. IX, pp. 212-13.

[28] Allen, *Silk Ind. of World,* p. 29.

[29] Testimony of Mr. Frank Cheney before the Industrial Commission. Vol. XIV, "Silk Manufactures."

[30] U. S. Census 1890, *Manuf. Ind.,* Pt. III, p. 217.

[31] Cf. pp. 75-80.

made, to 3,848,684 yards of plushes.[32] The value of each was very nearly the same, $2,480,000, as plush cloth on the average is about one-third more valuable than velvet. In 1905 this tendency was even more marked; the number of yards of plushes produced has *declined* since 1900 from 3.8 millions to 2.5 millions, while the manufactures of velvets have *increased* from 5.1 millions of yards to 7.3 millions.[33] There is an increase in the total *quantity* produced of nearly a million yards, but as plushes are the more valuable fabric the change in the proportion has resulted in a slight decrease of the total *value* of the pile fabrics production.

The case of plush and velvet manufacture furnishes an excellent example of the tendency of American manufacturers to turn their energies to the line in which conditions of production in this country give them the greatest advantage. This tendency has become strongly manifest in recent years. Velvets of uniform grades can be turned out in unlimited quantities, and are not so diversified as plushes. Velvets made in the Unted States are used mostly for carpets and upholstery, and their defects are not so carefully scrutinized in these as in articles of wearing apparel like plush textiles. Hence velvets can be made with a smaller amount of labor and greater use of machinery than plushes. The decline in the production of plushes marks the desertion of a field where our manufacturers struggle under disadvantages.[34]

The pile fabrics industry cannot as yet be regarded as one particularly well fitted for the conditions of production peculiar to this country. Protected by a tariff that has for many years been higher than on other silk fabrics,

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[32] U. S. Census 1900, Vol. IX, p. 207.

[33] Census *Bull.*, No. 74, p. 179.

[34] U. S. Census 1900, Vol. IX, pp. 207-8. Also *Thirty-fourth Ann. Rept. Silk Assn.*, pp. 94-5.

large quantities are still imported. The finishing and preparing of these goods for the market is a very delicate process, requiring considerable hand labor and technical skill. It seems entirely possible, however, that the application of automatic mechanical inventions has not as yet gone as far as it may. New devices are constantly appearing, and the recent invention of the high speed automatic velvet ribbon loom seems to give promise that pile fabrics may in time be made as cheaply here as abroad. In fact, the industry is still young. As in the case of certain kinds of dress goods that seem not yet to have reached their highest development, a protective tariff is still necessary to keep it alive, and may give an opportunity to the pile fabrics manufacture to reach in time a position independent of foreign competition.

In the list of silk goods the production of which has been doubtfully profitable in the United States, stands the class known as knit fabrics. The industry, started during the eighties, began to attain importance about the same time that velvet and plush manufacture was introduced. The Tariff Act of 1890 raised the amount of protection on knit goods from 50 to 60 per cent. This seemed to give the industry the impetus it needed, and several large firms grew up devoted to the making of knit fabrics.[35] The Tariff of 1894 reduced the protection to 50 per cent, and this, together with depressed business conditions, seems to have brought profits down to the vanishing point. In the hearings before the Tariff Committee in 1896-7, Mr. E. H. Davison, of the American Hosiery Company, stated that his plant was being run at a loss.[36] Numerous other manufacturers cor-

[35] *Tariff Hearings* 1896-7, pp. 1737-8.

[36] *Ibid.*, p. 1738.

roborated this statement.[37] The general complaint is that knitting involves large expense for labor and a very slow rate of production. Knit underwear and hosiery are made by a special process—the garment is modeled into shape as the knitting proceeds. This is slow and expensive compared with ordinary weaving, and involves much labor. "We are inclined to think", said Mr. Davison, "that in no other branch of goods is the proportion of hand labor to the cost of goods so large as in the manufacture of fashioned underwear and hosiery." This is undoubtedly an exaggeration, as Mr. Davison himself confessed that the manufacture survived on 60 per cent duty in 1890, and he asks for no more than that. There are, unfortunately, no separate statistics for knit goods given in the census report on silks for 1900,[38] and we cannot, therefore, compare the production in 1890 with that in 1900. From other sources, Silk Association reports and trade journals, however, we may judge that the knitting industry suffered some decline during the decade; and we may gage, with a fair degree of accuracy, the state of conditions in the industry.

It would seem, at first sight, that a knitting machine would require little personal attention. Each machine, however, requires an operator, and the output is much slower than on weaving looms. Not only the knitting itself, but other factors in producing knit goods, demand much personal attention. One item of expense arises from the fact that knit garments are sold not in bulk, but by the piece. This means careful folding and packing of each garment. Moreover, in the finishing process each

[37] Notably Mr. Ira Dimock, of the Nonotuck Mills, Florence, Massachusetts.

[38] U. S. Census 1900, Vol. IX, p. 213. Hosiery and knit goods are reported as a separate industry and are not in a form to compare with the figures as reported in previous years.

garment has to receive much the same sort of care that is given by a tailor to a suit of clothes. The seams and edges have to be pressed together; the facings, buttons, and often braid and fringes have to be put on. It is in the same class as the tailor-made suit, which costs so much more in this country than the ready-made garment.[39] It should be noted that in the case of cotton knit underwear most of this careful, painstaking finishing process is not necessary, the braids, fringes and facing being usually absent from this class of goods, and they being generally put up in lots of a dozen or so to a box. The manufacture of cotton knit underwear is a large and flourishing industry.

Knit goods therefore seem to stand somewhere in the half-way stage. On the whole it might be safe to say that the silk knit goods industry is rather more dependent on the tariff protection it receives than most silk fabrics. At 60 per cent it thrives; at 50 per cent it is in a more or less precarious position. At that point foreign goods threaten its hold on the market. For this reason the manufacture of such articles almost passes outside the sphere in which American conditions of production find their greatest advantage.

There are, however, certain other knit goods products in the case of which these conditions do not obtain in so great a measure. Particularly does this hold true of smaller articles, such as gloves and plain hosiery. There is evidence that the production of these goods is increasing at a rapid rate, and that their manufacture is in a prosperous condition.[40] It is easily seen that in the smaller fabrics the expense for labor is much less than is the case with large garments. The pressing of seams,

[39] *Tariff Hearings* 1896-7, Vol. II, pp. 1738-40.

[40] *Thirty-fourth Ann. Rept. Silk Assn.*, p. 96. *Thirty-fifth Ann. Rept. Silk Assn.*, p. 65.

sewing on of buttons and fringes, careful packing of each article, and general finishing that make the expense for hand labor bulk so large in the cost of production of underwear, are almost entirely absent in the case of silk hose and gloves.

In certain qualities of these goods we have an advantage over the foreign producer. The chief condition of success in knitting manufacture in this country is that the machines run at as rapid a rate as possible. The strain on the thread, when a knitting machine is run rapidly, is even greater than in the case of the power loom weaving broad goods. Only the best and most expensive raw silk can therefore be used. In Europe, however, where expense for labor is smaller, and where the cost of the raw silk is more of a consideration in the running expenses, the machines are operated much more slowly, and consequently thinner and cheaper raw silk can be employed. The knit goods made in this country are therefore of better and stronger material than those imported; or perhaps it would be truer to say that the foreign article, if as strong and uniform as that made here, cannot come in over the 60 per cent duty and be sold in competition with our own knit goods—speaking more particularly of hose and gloves. Consumers have not been slow to recognize the fact that American silk hose and gloves are superior to the foreign,[41] especially as the Europeans have not been guiltless of the charge of adulteration.[42] In consequence, the demand for American made hose and gloves has gradually increased.[43] The foreigner has practically been shut out in all the higher grades, "and even in the lower qualities the uncertainty

[41] *Thirty-first Ann. Rept. Silk Assn.*, p. 43. (1903.)
[42] *Thirtieth Ann. Rept. Silk Assn.*, p. 50.
[43] *Thirty-fifth Ann. Rept. Silk Assn.*, p. 65. (1907.)

and irregularity of the sizes, as well as the suspicion of adulteration, have worked against their general use."[44]

Another factor that has favored the American producer is his close touch with the domestic markets. This is more particularly true of gloves and mitts, the demand for certain kinds of which has of late far exceeded the supply, and has caught the foreigner unprepared.[45] A particular example is the fashion which set in some years ago of wearing silk gloves of very long arm length, a style that accompanied the reign of short sleeves.[46] On account of the suddenness with which this fashion spread, it was difficult to keep pace with the demand. The mills have been working overtime, while many new people have recently entered the field.[47] Whether this prosperity is due only to a temporary caprice of Dame Fashion, or to the fact that we have certain advantages over the foreigner in the production of these small knit goods, the producers themselves do not exactly know.[48] There is evidence, however, which goes to show that the sudden demand for long knit gloves is only an added factor in the prosperity of the industry. In 1903, before the long glove episode, Mr. Albert G. Jennings, of Brooklyn, wrote to the Silk Association, "The Fabric Silk Glove trade has shown a marked improvement."[49] In 1902 Mr. Julius Kayser of New York wrote, "The increase in the manufacture and sale of silk gloves for the past year has been very decided."[50] He sets the production for the year at a million dollars in round numbers, and adds, "The class of goods produced is of a very high

[44] *Thirty-first Ann. Rept. Silk Assn.*, p. 43.
[45] *Ibid.*, p. 44.
[46] *Thirty-fifth Ann. Rept. Silk Assn.*, p. 65.
[47] *Ibid.*, p. 66.
[48] *Ibid.*, p. 65. Report of Mr. Julius Kayser to the Silk Association.
[49] *Thirty-first Ann. Rept. Silk Assn.*, p. 43.
[50] *Thirtieth Ann. Rept. Silk Assn.*, p. 50.

order, and has entirely superseded the inferior article formerly imported."[51]

Even stronger evidence of our ability to compete with the foreigner in small knit fabrics is the prosperity in the silk hose branch, where the fluctuations of fashion cannot exercise so large an influence on the demand. In 1906 Mr. A. McCallum, a prominent manufacturer of hosiery in Northampton, Massachusetts, wrote to the Silk Association: "The silk hosiery business is in a flourishing condition . . . there are a number of new factories starting up in different parts of the country."[52]

The situation in the knit goods industry as a whole bears out fairly well the conclusions we attempted to draw from a consideration of the conditions under which the various articles are produced. Of the underwear and larger garments made in America we hear very little nowadays; silk buyers for the large department stores say that the greater proportion of such articles comes from abroad. There was no exhibit of such goods at the St. Louis Exposition.[53] Conditions of production in this country make it more profitable to turn out gloves, hosiery, and other fabrics which do not require so much personal attention from the operatives.

Whether even these could hope to survive with a protective tariff much less than 60 per cent, however, is doubtful. The knitting machine requires more labor per unit of output than does the weaving loom. In the case of cotton knit goods we find considerable quantities pouring into this country from abroad over the tariff barrier. Not only is the cost of labor much cheaper abroad, but

[51] Cf. *Tariff Hearings*, 1909, *First Print* No. 23, pp. 3005-10, and No. 47, p. 6283. The advantage over the European article seems to have been due to a patent process for strengthening the finger-tips.

[52] *Thirty-fourth Ann. Rept. Silk Assn.*, p. 96.

[53] *Ibid.*, p. 86.

the slower running of the machines makes possible the use of a much less expensive raw material, thus giving French and German manufacturers a double advantage. The American silk knit goods industry cannot hope to be independent of tariff protection from competition abroad until knitting machines be invented which are more automatic in their operation than any now known of. The chief improvements so far have been in the direction of increasing the speed of the machines, and considerable advance has been made in that direction.[54] The advantage of foreign manufacturers in turning out knit goods is not by any means as great as it was ten years ago.[55] The smaller articles could probably now be produced at a profit if the tariff protection were lowered to 40 or 50 per cent; but a much greater saving in the cost of labor must be effected before the industry can hope to be really self-supporting.

Very similar to the case of knit goods fabrics is the lace making industry in this country. Laces were first made about 1870-71, when Metz and Paris were besieged, causing the supply of laces from those centers to be suddenly cut short.[56] As may be imagined, lace machines are very elaborate, intricate, and expensive affairs. As in the case of knitting machines, the output is much slower than that from the weaving loom. With lace machines as with knitting machines, only the strongest and most uniform of threads can be used, the raw silks of Italy and France alone being available.[57] The amount of labor necessary to turn out a certain quantity of lace is large. Not only do the machines work slowly, but a great deal of clipping of threads has to be done to cut

[54] U. S. Census 1890, *Manuf. Ind.*, Pt. III, p. 222.
[55] *Thirtieth Ann. Rept. Silk Assn.*, pp. 52-4.
[56] Wyckoff, *Silk Goods*, p. 52.
[57] *Ibid.*, p. 51.

away superfluous fibres carried by the machinery from one point to another across the web. It seems strange that we have been able to make laces at all, in competition with foreign goods.

There are two or three causes that have contributed to making lace manufacture possible in this country. First, foreign laces are mostly made by hand,[58] or on hand machines. Power lace machines, slow as they are compared with weaving looms, yet move much faster than the crocheting needle or the hand machine. Second, the demand for particular kinds of laces often springs up so suddenly that our manufacturer, in closer touch with the domestic market, can anticipate the foreign producer in satisfying many temporary fads. Third, protected by a duty of 60 per cent, there are many kinds of laces, especially those of simple patterns, which can be made and sold here cheaper than the foreign product.

The production of laces in 1880 was $437,000. In 1890 it had declined to $261,750. To compete with the European manufacturer in a product so essentially one in which he has an advantage—a product requiring plenty of cheap, skilled labor, and so little suited to mass production—requires a protection of at least 60 per cent. From 1883 to 1890 the duty on laces imported from abroad was only 50 per cent, and at the end of the period our manufacturers were in hard straits.[59] From 1890 to 1894, and from 1897 to the present time, laces have enjoyed the protection of a duty of 60 per cent, and except for the period 1894 to 1897 our manufactures of lace rapidly grew, up to 1900. In that year the production had increased to $803,104. During this time the American product was gradually tending toward the simpler and more uniform designs, leaving the varied, elaborate,

[58] Wyckoff, *Silk Goods*, p. 54.

[59] *Tariff Hearings*, 1888-9, p. 596.

and fancy textures to the foreigner.[60] Since 1900 our manufactures of laces have suffered a decline, while the importations have steadily increased. It is as though the foreigner, seeing the duties on broad goods and ribbons raised, and having no especial advantage over American producers in the fabrication of those articles, turned to laces as a field in which he could successfully compete. Imports of laces have risen from $3,000,000 in 1900 to an average of $5,000,000 or $6,000,000 in the last few years. The domestic production in 1905 was only $745,-000.[61] The output is still in the nature of plain goods.[62] One great difficulty that has always confronted the makers of lace goods in this country is the securing of sufficient skilled labor. "The scarcity of expert workmen", says Mr. Franklin Allen in the Census Bulletin report, "has prevented the domestic manufacturer from insisting upon such qualities of workmanship as would be demanded of them abroad. The condition in this country of more machines than there are men to run them, tends to carelessness in the work."[63] Mr. Albert Gould Jennings, of Brooklyn, New York, says, "New machinery and constantly improving methods have required such experienced labor as only the old manufacturing centers abroad can furnish."

There is perhaps no feature in the conditions of lace production that offers less encouragement that it may some day become an independent American industry than this requirement of high technical skill. The one feature in which the American laborer surpasses the workingman of all other nations is his native intelligence, his ingenuity,

[60] *Thirty-first Ann. Rept. Silk Assn.*, p. 42.

[61] U. S. Census *Bull.*, No. 74, p. 174. Imports of laces, 1907, $6,686,000.

[62] *Thirty-first Ann. Rept. Silk Assn.*, p. 43.

[63] U. S. Census *Bull.*, No. 74, p. 179.

his quick grasp of mechanical principles. In any industry requiring general intelligence and mechanical skill, but no particular training in any one line, the workmen of this country stand preëminent for efficiency. In any industry demanding specialized technical training he is not at home. The demand for skilled technical labor in the lace making industry relegates it at once to Europe, where the labor surpasses ours in efficiency.

While it cannot be said that the silk industry as a whole has reached a position where it is not liable to suffer from the entire removal of the tariff, it is undoubtedly true that certain portions no longer stand in need of protection. In this class we may place the manufacture of thread and the throwing industry. The plainer kinds of ribbons can be made as cheaply here as abroad. Practically the same is true of dress goods. In the case of fabrics of highly elaborated designs that can be turned out only in limited quantities, European novelties, and so on, the tariff merely raises the price to the consumers. This is also true of hand-loom products of the very dear and the very cheap variety.

When we come to braids, fringes, curtains, and trimmings, we find that the plain and simple kinds that are adaptable to large-scale power weaving can be successfully made here, probably as cheaply as abroad; the more elaborate varieties cannot compete with the foreign products even under the present high tariff, and give little promise of ever doing so.

Pile fabrics and knit goods are not much more than able to hold their own with the assistance of the duties now appertaining to those goods, and the "young industries" argument for protection would probably apply here.

The manufacture of laces does not appear to be suited to American conditions of production and the industry

is struggling along, suffering from constantly increasing foreign competition in spite of the high duties. Protection in this case involves a seemingly permanent economic loss.

### 18. DEPENDENCE ON PROTECTION: OPINIONS OF MANUFACTURERS, IMPORTERS, AND BUYERS.

Conclusions reached by an investigator who views the subject from the outside ought to be supplemented by a consideration of the opinions of those on the inside. It is natural to suppose that those most directly interested in the silk trade, as producers, importers, or retailers, will be better informed than any others in regard to the economic status of our silk industry. From this class of men comes all the testimony in the reports of the various Tariff Hearings.

To hope for scientific results from this source, however, is to meet with disappointment. Precisely because these men are interested, it is next to impossible to get from them an unbiased opinion. Ask any manufacturer whether he thinks the domestic silk industry is dependent on the tariff, and nine times out of ten he will answer, in a tone of finality, that without protection the entire industry would go to the wall. Ask him if the prices of many silk fabrics are not as cheap here as in Europe, and he will admit that it may be so. Does he think that these particular branches of the industry still need protection? "Certainly they do; we pay our weavers twice what they pay in England or France. Take away protection, and wages here would drop to European levels. Perfectly obvious."

Occasionally, however, urgent need calls forth from some intelligent manufacturer a more satisfactory defence of his position. Such was the letter of Mr. Charles

Cheney to Mr. Andrew Carnegie, printed in the New York Times for January 10, 1909. It may perhaps be worth while to examine certain parts of this letter in detail.

Mr. Cheney begins: "You have stated without qualification that it is your belief that a protective tariff is only justifiable in order to give new industries a chance to take root and establish themselves, and that when one has become well established, or has had a fair chance to do so, it should be weaned from its protection and forced to fight its own battles without further government assistance." He combats this contention on the ground that "there are many industries, . . . now thoroughly organized or established, which could with almost certainty face their competitors in the open market without fear, but for one thing—the great difference in cost of labor in the United States and in lands across the seas." Mr. Cheney admits that in certain industries prices are lower here than in Europe, in spite of higher wages. "But", he continues, "you will readily admit that a similar result cannot be expected all along the line. *In the large majority of cases*[1] we cannot hope that inventive skill, superior organization, and better business methods will be factors large enough to overbalance the added cost of labor; and, even if they should do so temporarily, it could only be so for a very short time, as every improvement in machinery and method is now heralded about the world almost instantly, and people of other countries are about as quick as we are to seize every advantage." Mr. Cheney concludes that for this "large majority of cases" protection should be continued.

This whole argument is based on the assumption that the government should continue indefinitely to bolster up

[1] The italics are mine.

all industries that are running at an economic loss, even when there is no hope that they will ever become independent. The consumer, for example, must expect forever to pay double prices for woolen goods, and the industry should always be artificially stimulated, although the laborers who produce woolen goods are not half as efficient as when employed in other fields. Surely it is apparent that if the woolen weavers were making steel, for example, their product would sell for enough to buy from abroad twice as much woolen goods as they now can make. No one advocates breaking up a great industry and throwing thousands of laborers out of work by a sudden removal of tariff support; few will deny a reasonable amount of protection to an industry which may some day hope to become independent; but to bolster up permanently a manufacture that must always, from an international standpoint, be unprofitable, is to tax the nation at large for the temporary advantage of a few men, and to retard the development of the nation's resources in the fields where lies its greatest hope of success.

Though few will subscribe to Mr. Cheney's conclusion, there is room for serious difference of opinion as to his premises. His intimation that the silk industry, in particular, is entirely dependent on tariff protection, cannot be allowed to pass unchallenged. Our exports of silk goods, already exceeding half a million dollars annually and steadily growing,[2] prove conclusively that there are *some* branches of the industry that no longer need fear to meet foreign competition in the open market. Some other branches of the domestic manufacture, as we have seen, have not yet reached their highest development, but give promise of ultimate independence. In fact, it is

[2] Cf. Testimony of Mr. Julius Kayser before the Tariff Committee of 1909, in regard to the exports of silk goods; *Tariff Hearings* 1909, *First Print* No. 23, p. 3009.

possible that the silk industry is more deserving of sympathetic treatment at the hands of the tariff reformers than Mr. Cheney has made it out to be. Certain kinds of pile fabrics and knit goods should be protected, not because they can never hope to be made here as cheaply as abroad, but precisely because they can. The laces, heavy tapestries, novelties, and other fabrics the production of which requires a great amount of hand labor, are the only branches that fit into Mr. Cheney's characterization of the industry as a whole. It is because these products are not suited to American conditions of manufacture, and can never hope to be made here as cheaply as abroad, that their production ought not to be artificially stimulated.

A common contention among manufacturers is that home competition has made prices lower than if we had been obliged to depend on foreign products alone. There may be some truth in this, though perhaps not in the sense that the manufacturers intend. In so far as domestic prices are lower than those in Europe, the statement is undeniably true. It might also be true in another sense. If there were no domestic industry, and the American demand were greater than foreign producers of silks could supply, prices both here and abroad would be higher. There is little doubt, however, that if there had never been any domestic manufacture French and German and English establishments would now be in a position to supply the American market. If the statement is intended to mean that prices would be kept at artificial levels by European producers, in the absence of domestic competition (which is the only interpretation that would justify continued support of an industry that can never hope to compete on equal terms with the foreigner), it is easily proved to be without foundation. The keen rivalry

of French, German, and English manufacturers keeps prices at their lowest levels in all markets. A combination to raise prices between such widely scattered concerns would be impossible; if at all effective, it would have to include Asia as well as Europe. A case analagous to the one supposed is found in our imports of raw silk, amounting now to over $70,000,000 annually.[3] Here, apparently, is a splendid opportunity for the foreigner to put up prices. Yet no one will maintain that we pay more for raw silk because there is no domestic competition, or that prices here are higher, by more than transportation charges, than those in Europe.

Many manufacturers, in speaking of the high wages paid in this country, stoutly assert that they are due to protection, and maintain that if the tariff were removed wages in the silk industry would be lowered to the level of those paid abroad. Surely it is late in the day to have to insist that high wages in general are not due to generosity on the part of manufacturers, but to the productive power of the laborers themselves. The silk weaver would not accept a decrease in his wages from $12 to $5 per week, because he can make $12 worth of steel or of shoes or of typewriters in a week, and receive that much pay for his labor. In the woolen industry he really can make only about $6 worth of cloth, and the consumer is taxed enough more than that to make up current wages to him and profits to the manufacturer. In the silk lace industry he makes laces that sell for $800,000 annually, but which are worth only about $500,000 in the world market.[4] The consumer is taxed $300,000 a year to keep the manufacture alive. If the lace makers were employed on some

[3] *Semi-Ann. Rev. Silk Trade,* August, 1908.

[4] As the lace industry is on the decline, though protected by a duty of 60%, we may assume that domestic laces sell for the full amount of the foreign price plus the duty. $500,000 + 60% = $800,000.

of the cotton goods we export, their product would be worth $800,000 or more, and the country would be richer by $300,000 a year on account of the change. While this is true of lace and some other fabrics, in most branches of the silk industry, as we have seen, the laborer is worthy of his hire; his product is worth, in the world market, the $12 a week which he receives. The general productive power of the laborer, which regulates his wages, cannot be impaired by removing a tariff duty.

If there are difficulties in the way of getting consistent conclusions from manufacturers, the case is not much different when we apply to the silk importers. Though conservative in their public utterances for fear of damaging their case, in private their views on the present tariff on silks are very highly colored. Of real value, however, is their knowledge of the kinds of fabrics that continue to be imported, and those that are at present excluded, under the present protective régime.

The opinion seems general among importers that very few things which compete directly with American silks are now sent to this country. More than that, many of them maintain that, while importations would undoubtedly increase if the tariff were removed, only a few branches of the domestic industry would be affected thereby. Their contention is that American and European silks are two entirely different, distinct, and separate products, used for different purposes and supplying different demands. Foreign silk fabrics they divide into two classes: the very cheap hand loom products, already described, and the more expensive silks, whether made by hand or by machine. The American article comes between these two, and supplies a demand which neither of the foreign varieties could satisfy. Twenty or thirty years ago, it is said, silk dresses were a sort of government bond in a

lady's wardrobe, and when bought were intended to return an unfailing interest in rustling splendor for several seasons. That demand was satisfied, and so far as it now exists, is still satisfied by European silks of the better variety. But times have changed. The debutante or the society matron must have several silk dresses a year, in no one of which does she dare to appear more than a few times. So long as her gown looks well during the period she has use for it, the society woman is not curious as to its lasting qualities after she has discarded it. The demand for goods of this kind is satisfied by American silks. An importer showed the writer two pieces of silk, one of European make, and the other American. To the inexperienced eye there was very little difference between the two. Holding up the foreign made article the importer said, "This piece sells for twice the price of the other; if there were no tariff it would sell for about half as much again; but there is no demand for it. It will wear twice as long as this American sample, and for some purposes it might be considered twice as valuable, but there are very few purchasers who would pay more for one than for the other. If the tariff were taken off, we should sell more of the European article on account of the lower price we could make on it, which would be a good thing for us; but it would not encroach on the market for the American product. They are two different things, like coal and kindling wood; one is good for certain purposes, the other is useful in other fields: Europe makes one, we make the other."

Another importer, speaking on the same subject, declared that Germany and France could not make the goods most largely in demand in the American market and sell them at American prices. Poorer goods, made of cheap fibres, they can put on the market at very low prices,

but the inferiority of these articles is obvious to the most unpracticed eye. Better goods than ours, made of good fibres on slow-moving machines or hand looms, are made abroad, but these cannot be sold as cheaply as domestic silks. Fabrics of good appearance and moderate price, such as are made here, cannot be produced abroad. The strain of rapid weaving impairs the wearing qualities but cheapens the cost of production of the American article, without injury, however, to its appearance.

These statements, and the conclusions to be drawn from them, are more or less substantiated by those who have had experience in purchasing silks for retail distribution. The silk buyers of the great retail stores are more interested in fashion changes and price quotations than in tariff questions or the dependence of the domestic industry on protection; but their acquaintance with market conditions and demands of consumers is of value. They agree that the demand for foreign silks of the better grades is comparatively limited. Where heavy tapestries, curtains, altar cloths, and similar things are wanted, European fabrics are favored. Women of peculiar or eccentric taste, who want to wear "something different" and can afford to pay for it, will often prefer the foreign silk because of its unique pattern. Fabrics desired for unusual purposes, such as state dresses, theatricals, house decorations, and "novelties" of various kinds, are supplied as a rule from European stocks. Nevertheless, by far the greater part of the American demand is for American goods, for fabrics that will answer the average purpose and can be bought for a moderate price. Silk textures that will satisfy this general class of customers are very seldom seen in the Paris or London shops.

Perhaps it may not be out of place to close this chapter with a few personal observations and experiences. During

a month spent in Paris in the summer of 1908 the writer visited most of the shops where silk fabrics are on sale. He was amazed, as every visitor to the French capital must be, by the wonderful exhibitions of high grade silks of every variety of pattern, weave, and workmanship. Cheap silks, "pongees," "chappes," "tussahs," and others of inferior grade, were also there in abundance. But good looking fabrics of moderate price were conspicuous by their absence. In the *Bon Marché* the writer bought a silk *ceinture* for which he paid 25 francs; he was later shown an apparently exact duplicate of American make at Marshall Field's in Chicago that retailed at $4.50. Many will recall similar experiences. A homely case that will make the situation clear to everybody is the matter of neckties. There is an abundance of silk ties in Paris that retail at a franc or less. Made of spun or "waste" silk, they are not particularly attractive; no more so than our cheap half-cotton ties. The cravats that sell for about fr. 2.50 are not very much in evidence; such as are displayed are distinctly inferior in taste and appearance to the common 50 cent American necktie. The "stylish," wearable cravats begin at five or six francs. Here one enters Beau Brummel's paradise: there are no better scarfs made anywhere. A few of them are seen in this country, retailing from $2 up. It is easy to conceive that if the tariff were entirely removed on these articles the market for the domestic product would be very little affected. The inferior ties would sell for about a quarter of a dollar, with few purchasers; the medium grades would have no chance at all of competing with our ordinary 50 cent neckties; the better grades, which compete with nothing made in this country, would sell for upwards of $1.50.

There is no need to attempt to make any general de-

ductions from the opinions of those on the field. Utterances so diverse cannot well be harmonized. If this resumé, imperfect as it is, has thrown any light on the position of American silks in reference to foreign competition and the market demands, it has served its purpose.

## 19. CONCLUSION.

The conclusions to be derived from our study of the American silk industry have been for the most part already indicated. We have before us an illustration, and a remarkable one, of the principle of protection to young industries. Sheltered from foreign competition by heavy import duties, the manufacture of silk fabrics has increased from almost nothing to proportions that make the industry in this country in size of output the first in the world.[1]

The results attained are the more extraordinary from the fact that the difficulties in the way seemed at first sight insuperable. We did not make the raw material, and such supplies as were obtained from abroad were not only inadequate as to amount, but were for many years discouragingly unsuited to conditions of successful production here. The raw silk cost our manufacturers more by at least the transportation charges here, and we had none of the organization that centuries of successful manufacture had given to the European. These were, however, faults that might be cured. A difficulty that

[1] In 1900 France and the United States stood very nearly equal, France being slightly in the lead. In 1905 the domestic production stood at $132,000,000 (gross) and that of France at $129,000,000. Though price comparisons are not possible, and statistics for the last few years are not available, the United States is undoubtedly now in the lead. Our consumption of raw silk is now much greater than that of any other nation. Cf. Allen, *Silk Ind. of World*, p. 63, also *N. Y. Times* for Jan. 10, 1909, letter of Mr. Charles Cheney, of South Manchester, Massachusetts, to Mr. Andrew Carnegie.

could not be remedied was the great difference in the wages received by laborers here and those abroad. In addition, the machinery was not made in this country, and had all to be imported. These are only a few of the obstacles that seemed to block the way to a successful manufacture of silk fabrics in the United States.

One by one the difficulties have been cleared away or their influence obviated. The struggle for more satisfactory supplies of raw silk extended over nearly half a century. Machinery had to be invented and sent abroad to secure the better reeling of the yarns. It is only recently, as we have seen, that commercial agreements with eastern countries have at last secured a supply of raw silk that is suitable to conditions of production in America.

Through nearly all this period, however, the raw material for weaving cost the American manufacturer more than it cost his foreign rival. Less than a score of years ago began a remarkable development in the throwing industry, the invention of machinery that resulted finally in lowering the cost of preparing the raw silk for weaving to a point below that prevailing in any other country. The disadvantage of higher cost of raw material has at least disappeared.

The higher wages paid in this country have presented a problem more difficult than all others to solve. As we have seen, in the case of certain fabrics, no solution has as yet been arrived at. The only hope lay in developing machinery and mechanical contrivances to such a point that the higher cost for labor would be offset by a correspondingly greater efficiency on the part of the operative. We have seen to what extent this has taken place. The first step was the making and perfecting of machines of our own. This done, attention was turned toward adapting them to the high priced labor conditions of this

country. Beginning with the throwing industry, and extending to ribbons, and within the last ten years to broad goods, mechanical progress has resulted in steadily increasing the output per unit of labor. The machines have run more rapidly and have been made more automatic in their operation.

The results have been indicated. The production of most varieties of silk goods in America has increased by leaps and bounds, and prices have gone steadily down in a period when the price levels of the world have been steadily rising.[2]

In view of all these facts, it must be concluded that the policy of protecting young industries has been justified in the case of the American silk industry. The "young industries" argument for protection is different from any other in favor of high duties. The principle of protection to young industries assumes that new manufactures are not always able to hold their own against the older, long established manufactures of other countries: that if sheltered from foreign competition during the formative period of their growth they will eventually be able to forego artificial safeguarding. Only when an industry so protected has reached a position of independence can the principle be said to be justified.

A considerable part of all the silk industry would probably continue to prosper were the tariff removed entirely. Our exports of silk manufactures have more than doubled in the last ten years.[3] Most of the difficulties that have stood in the way of successful and independent manufacture have been removed. Some few goods, already

[2] Besides references in text, see U. S. Census *Bull.*, No. 74, pp. 178ff.

Average value of American broad silks, 1900—45.6c. yd.

Average value of American broad silks, 1905—43.5c. yd.

[3] *Supra*, p. 117.

enumerated, the production of which is not suitable to conditions in this country, form exceptions to the foregoing conclusions. Their continued production involves an economic loss. The application of strict economic doctrine to the silk schedule would involve the removal altogether of duties on fabrics of the latter class. It is recognized that such a course, though highly beneficial from the standpoint of national economy, could scarcely avoid individual loss and a serious disturbance of vested interests. The issue here is that of public against private interest. Yet whatever may be the trend of future legislation on this and other disputed points, it is apparent that the tariff of the past has in the silk industry reared itself a proud monument; and whatever the anomalies and inconsistencies in the individual schedules, more praise than blame attaches to the ultimate results achieved.

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